SECOND SURGICAL OPINION PROGRAMS: AN ANALYSIS OF PUBLIC POLICY OPTIONS

Volume III: APPENDICES

March 1985

Abt Associates Inc.

Eugene C. Poggio,
Project Director
Henry B. Goldberg,
Deputy Project Director
Richard Kronick
Robert J. Schmitz

Abt Associates Inc., Cambridge, Massachusetts

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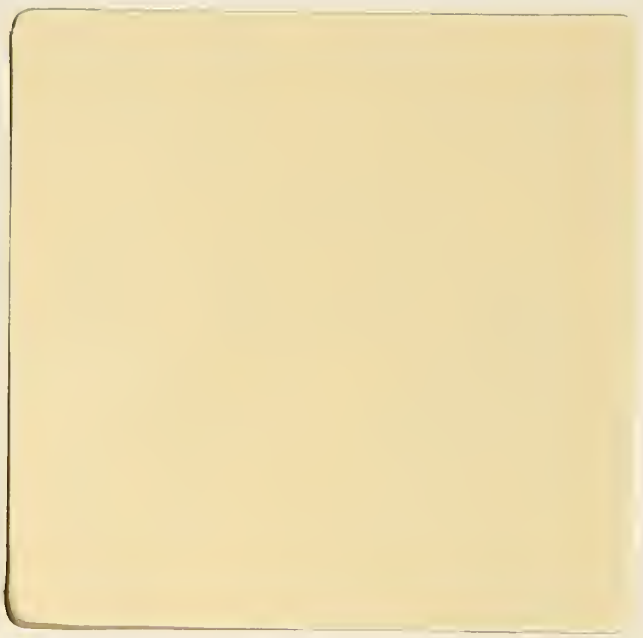

ABT ASSOCIATES INC.
55 WHEELER STREET, CAMBRIDGE, MASSACHUSETTS 02138
TELEPHONE • AREA 617·492·7100

AAI #84-55

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Eugene C. Poggio,
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Richard Kronick
Robert J. Schmitz

University of Michigan

R. Van Harrison
Paul Ertel, M.D.

Submitted to:

Office of Demonstrations
and Evaluations
Office of Research and Demonstrations
Health Care Financing Administration
Area 2-F-3, Oak Meadows Building
6325 Security Boulevard
Baltimore, Maryland 21207

Health Care Financing Administration

Alan S. Friedlob
Project Officer

Eugene C. Poggio	Craig G. Gorden	Craig G. Gorden
Contract Manager	Quality Control Reviewer	Management Reviewer

PREFACE

This report presents findings from the "Evaluation of the Impact of Second Surgical Opinions for Elective Surgery," funded beginning in 1978 by the Health Care Financing Administration (HCFA) and conducted by Abt Associates Inc. in collaboration with the University of Michigan. The second surgical opinion programs that are evaluated include the mandatory Massachusetts Medicaid program funded by the state's Department of Public Welfare, the HCFA-funded voluntary Medicare demonstrations in New York and Michigan, and the National Second Surgical Opinion Program (NSSOP), also funded by HCFA.

This report documents findings about these second opinion programs, as well as findings from the literature about other programs. Program participation, the frequency with which second opinions do not confirm the need for surgery, and the frequency with which program participants decide to undergo surgery are each examined, as are the effects of these programs on surgery rates, costs, and the health outcomes of program participants.

The report is organized in three volumes. Volume I is an executive summary of the major findings about the four programs. Volume II contains six chapters that describe the study and present the findings (introduction; review of previous research; one chapter each on the Massachusetts Medicaid program, the New York and Michigan Medicare demonstrations, and the NSSOP; and conclusions). Volume III contains five appendices (data sources and analyses; ratings of surgical procedures and development of health status outcomes by physician panels; analysis of the cost-effectiveness of a publicity campaign for the New York program; a game-theory model of surgical decisionmaking by patients; and data collection instruments).

Additional information from the evaluation can be found in the following documents:

- E.C. Poggio et al., Research Objectives and Methodology Report, April 1980, which describes the research design for the evaluation;
- J. Kruse and K. Howard, Second Surgical Opinion Program Status Report, April 1980, which describes the existing second opinion programs sponsored by private insurance carriers, Blue Cross/Blue Shield plans, and large self-insured corporations;
- K. Howard, First Year Report of the Evaluation of the Impact of Second Surgical Opinions for Elective Surgery, March 1980, which contains detailed case studies of the Massachusetts, New York, and Michigan second opinion programs and preliminary research findings on the New York second opinion program;

- E.C. Poggio et al., Second Surgical Opinion Programs: An Investigation of Mandatory and Voluntary Alternatives, September 1981, which includes descriptive analyses and preliminary analyses of program effects on surgery rates and costs;

- First Report on the National Second Surgical Opinion Program, May 1979, and Second Progress Report on the National Second Surgical Opinion Program, March 1980, which describe the background, implementation, and development of this program; and

- H.B. Goldberg et al., Callers to the National Second Surgical Opinion Program, April 1982, which provides detailed tabular analyses of NSSOP users.

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Appendix A

DATA DESIGN

The analyses of the four second surgical opinion programs described in the body of this report utilize a wealth of data gathered from diverse sources. This appendix describes each source, the process of data collection, and the procedures used to convert the raw data into final analytic files.

In cases where secondary data (i.e., data originally collected for other purposes) were used for the analyses, it was sometimes necessary to make assumptions about the nature of a specific data item or to alter analysis plans to make them accommodate the available data. These compromises result in qualifications to the resulting analysis files, as noted at the appropriate points in the discussion.

The appendix is divided into three main sections, corresponding to the structure of the analysis chapters of the report. Section A.1 discusses the data used for the analysis of the Massachusetts Consultation Program for Elective Surgery (CPES), discussed in Volume II, Chapter 3; Section A.2 discusses the data relating to the analysis of the Medicare demonstration programs in New York and Detroit, discussed in Volume II, Chapter 4; and Section A.3 describes the data used for the analysis of the National Second Surgical Opinion Program (NSSOP), discussed in Volume II, Chapter 5.

A.1 Data for the Analysis of the Massachusetts Consultation Program for Elective Surgery

This section, describing the data used for the analysis of the Massachusetts Consultation Program for Elective Surgery (CPES), is composed of five subsections, each describing the acquisition and processing of a particular type of data:

- data for the analysis of program utilization, based on data supplied by the Massachusetts Department of Public Welfare;
- data for the analysis of the program disposition of participants, based on data abstracted from the program records of a sample of participants;
- data for the analysis of the surgical outcomes of program participants, based on analysis of Medicaid claims history files;
- data for the analysis of CPES impacts on participant surgery decisions, based on personal interviews with CPES participants; and

- data for the analysis of the program's effects on the overall rate at which the eight procedures to which it applies are performed among the covered population, based on data extracted from Medicaid claims files in Massachusetts and a comparison site.

A.1.1 Massachusetts CPES—Summary Program Data

In order to prepare basic descriptive analyses of the CPES, it was necessary to obtain summary data on program utilization: the number of referrals by foundation and by surgical procedure and the distribution of these cases across all possible dispositions (i.e., confirming first consultation, nonconfirming first consultation, confirming second consultation, program waiver granted, etc.).[1]

As part of its contract with DPW, each foundation submits monthly statistical reports listing the cases referred during the month and any actions on cases referred during previous months. These reports are the only source of utilization data for the CPES (other than the individual case files at the foundations). Aggregated across months, they provided the necessary summary data. In order to perform the aggregation, however, it was not possible to work with each monthly report as submitted; rather, it was necessary to follow each individual case through each month's reports from referral to completion (which could be up to six months after referral) in order to determine its final disposition.

For the analysis of the CPES performed by Martin et al. (1980), tables had been prepared summarizing the disposition of all cases referred over the first 12 months of program implementation at each of the five foundations (disregarding a two-month start-up period, which was felt to be unrepresentative). For the current evaluation, updated tables of total utilization from program implementation through September 1982 were produced by a member of the evaluation staff working on site at DPW. Each specific case was tracked by name from month to month in order to assign a final disposition and to prepare an accurate summary of each month's program activities.

There does appear to be some incidence of incomplete reporting of actions on pending cases at two of the foundations, and cases pending from earlier than one month prior to the current month, both with and without action, do not reliably appear on the reports. Some on-site validation was attempted. At one foundation, of 129 pending hysterectomy cases (over a five-month period) for which no action was reported, only 87

[1]Such data describing the universe of the program population were also needed to validate the sampling weights applied to the program record sample file and to draw the sample for the patient interviews.

could be readily located in the files; of these, 29 showed action that had been unreported or misreported in the monthly reports. Thus, it appears that there may be a considerable margin of error in these summary figures; however, the correcting of these problems would require a complete audit of the files at the foundations, an effort clearly beyond the scope of this project. For the earlier months, questionable cases were researched either on site at the foundations or through correspondence with the staff at the foundations. When the extent of the problem was brought to light by this data collection effort, DPW staff modified the format of the monthly reports required of the foundations in order to minimize the likelihood that data were being omitted.

A.1.2 Massachusetts CPES—Program Record Sample Data

The Consultation Program for Elective Surgery (CPES) is administered by five health care foundations under contract to the Massachusetts Department of Public Welfare (DPW). Aside from operating the program according to two different models until mid-1981 (the desk audit model at the Pilgrim Foundation for Medical Care and the Health Care Foundation of Western Massachusetts and the personal consultation model at the other three foundations), the five foundations each use different forms to collect data on program participants and maintain their files in differing formats. In order to evaluate the program, an extensive data set, consistent across all five foundations, was needed.

Because the program was implemented under severe time constraints as the result of a state legislative mandate aimed at immediate cost containment, preparation of data for an evaluation was not made part of the original contracts with the foundations; in fact, several of these contracts had clauses limiting the release of data and establishing the foundations' proprietary interests in the information generated. In this situation, the foundations could not be required to prepare consistent data for evaluation purposes.[2] However, they did have an interest in having the program evaluated and were therefore willing to discuss the supply of data to this project.

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[2]This problem was exacerbated by the fact that a recent court ruling in the Washington, D.C., area had held that PSRO data were subject to release under the Freedom of Information Act even though the PSROs were private organizations, because the program was supported with federal funds. The foundations were not concerned about their own "vulnerability" to such compulsory release (since they received no federal funds) but were concerned that the evaluator, under federal contract, could be compelled to release any information collected.

A series of negotiation meetings were held with the foundations soon after the evaluation began. In all these discussions, it was made clear that the foundations' primary problem with the data collection was the issue of disclosing patient and physician identities. This concern was addressed by designing data collection procedures that did not include personal identifiers on physicians or patients (see the following section), and all five foundations agreed to participate in the data collection effort.[3]

Confidentiality Safeguards. The procedures developed for this data collection effort maintained the privacy of both patients and physicians because personal identifiers were never in the possession of the evaluation; thus, there was no chance that they would be incorporated into any data base or otherwise revealed.

Each case, defined by a separate physical folder or form in the foundation files, was assigned a blind identifier. Neither the patient's name nor Medicaid number was included in the data abstracted. (This means that a single person participating in the program more than once would appear in the analysis file as two separate cases if both files were selected into the analysis sample.) The case number assigned was written on the case record itself for later reference. At the Charles River Health Care Foundation, at the foundation's request, pre-existing case identifiers, assigned by the foundation, were used as the identification numbers.[4]

Nondisclosure of the identity of participating physicians was extremely important to the foundations and their boards of directors. Therefore, each physician was also assigned a blind identifier. These numbers, unlike the patient identifiers, were each unique to a single physician within the foundation. However, these codes were not unique to physicians across foundations, so the total activity of a particular physician could not be tracked. At the Pilgrim foundation, pre-existing physician identifiers were used.[5]

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[3]The HCFA-funded DPW analysis of the CPES (Martin et al., 1980) was entering its data collection phase during the same period. Efforts were made to undertake coordinated data collection at the two foundations where overlap would occur. The first of these two foundations refused to allow such coordinated activity, so the two analysis teams collected data independently. At the second foundation, the data were collected jointly, utilizing a two-layer form. In addition to the data items collected jointly, the current evaluation collected a number of additional data items on a sample of the cases.

[4]This introduced some bias because some cases, especially those referred inappropriately, are not assigned such numbers by the foundation and were therefore not selected into the sample, while at the other foundations, such cases could possibly be included. The number of such cases is small.

[5]This caused problems with two or three physicians whose numbers were interchanged by the foundation at one point. These problems were later resolved.

Another foundation concern was the possible indirect identification of a particular physician on the basis of his/her caseload, or indeed the examination of physician caseloads at all. This concern was allayed through the sampling of cases in the collection of the data. In this way, no complete profile of any physician could be constructed.

At the foundation offices, a numerical code was also assigned to the hospital proposed as the site of the surgery; this was more for data processing convenience than for reasons of confidentiality. The code used was the six-digit code used by the American Hospital Association, where the first two digits signify the state and the last four the hospital.

Sampling. As part of the initial evaluation design, it was determined that the analysis of the CPES could be based on a sample of cases. Not only was this statistically sound, but a sampling approach had the additional advantage of conserving resources and reassuring the foundations that physician caseload profiles would not be constructed and examined.

At the outset, a systematic stratified sample was specified, stratifying by foundation, procedure, and disposition. This was soon converted to a stratified random sample, retaining foundation and procedure as the main strata and using a disposition stratum for selected procedures only. The sampling fractions used are presented in Table A.1.

There were four minor changes in the fractions used during the period of interest. At the Charles River foundation, the change from systematic to random sampling represented a change from five-sixths (or 83 percent) to 90 percent of all approved tonsillectomies/adenoidectomies, while at the Pilgrim foundation it represented a change from 67 to 70 percent of cholecystectomies. A program change at the Pilgrim foundation as of January 1980 (the cancellation of the criteria for tonsillectomy/adenoidectomy and submucous resection) occasioned the decrease in the sampling fraction for criteria-not-met cases for these procedures from 1.00 to 0.30 and 0.50, respectively.

As noted above, there is a problem with the inclusion of cancellation cases in the sample. The definition of a case as a cancellation is not consistent across the foundations and may in fact vary within a foundation, depending on how far a case has progressed in the program. If dual insurance coverage is discovered soon after or at referral, a record may or may not be established at all; if it is discovered after a

Table A.1

MASSACHUSETTS CPES

PROGRAM RECORD SAMPLING RATES (IN PERCENT) BY PROCEDURE AND FOUNDATION

Procedure	Foundation				
	Bay State	Central Massachusetts	Charles River	Pilgrim[a]	Western Massachusetts
Tonsillectomy/adenoidectomy	10	25 confirmations, 100 other	90 confirmations, 100 other	Through 12/79: 30 criteria met, 100 other Beginning 1/80: 30 all cases	20 criteria met and confirmations, 100 other
Hysterectomy	15	50 confirmations, 100 other	100	50 criteria met, 100 other	40 criteria met and confirmations, 100 other
Meniscectomy	50	100	100	100	100
Varicose vein ligation	100	100	100	100	100
Hemorrhoidectomy	100	100	100	100	100
Cholecystectomy	25	100	100	70	100
Laminectomy/disc excision	60	100	100	100	100
Submucous resection	40[a]	100	100	Through 12/79: 50 criteria met, 100 other Beginning 1/80: 50 all	100

[a]As of January 1980, desk audit criteria were no longer used for tonsillectomy/adenoidectomy or submucous resection at the Pilgrim foundation.

consultation has been scheduled, the record may be retained and coded "cancellation," or it may be destroyed.

The analysis based on these data includes cases referred to the CPES between May 1, 1978, and June 30, 1980. The earlier bound was chosen because it marks the beginning of full program implementation at all five foundations. The later bound was chosen because it was the latest month for which all cases could be assigned a final disposition at the time that data collection was completed.

For the purposes of the analyses presented in Volume II, Chapter 3, the sample cases were weighted by the inverse of the original sampling fractions. The data cleaning resulted in the elimination of some cases; the sample weights were, however, not adjusted. Therefore, the total number of cases presented in the tables based on the program record file does not equal the number of cases in the tables based on the summary monthly report data.

After initial abstraction of the backlog of cases processed since program implementation, trips were made to each foundation approximately quarterly, and cases were sampled and abstracted for the months that had elapsed in the interim. On each trip, an abstractor trained to work with the foundation records was accompanied by an accredited medical records technician (ART). The abstractor completed the intake form abstract containing basic information on the recipient and the consultations (dates, general outcome, billing amount(s) notification dates, etc.), and the ART prepared detailed information on the consultation. This involved converting physicians' narrative information on the foundations' consultant report forms to the categorical data called for by the evaluation Consultant Report Abstract (CRA). The categories on the CRA were based on those used by the Medicare demonstrations, in order to provide a data set that would be consistent across the two types of programs.

The data collection forms themselves are presented in Appendix E as Exhibits E.1 and E.2. While most items are self-explanatory, a few comments are in order:

- The Medicaid procedure code for the proposed surgery was not collected because it was not available at the foundations. It is not used in the referral process and was therefore not entered on the foundation records. Furthermore, the procedure information given in the record was frequently too vague to allow deduction of the code by the abstractors. Therefore, the narrative description of the procedure was collected on site, while clinical codes (initially ICDA-8, later ICD-9-CM) were assigned as part of the data editing process.

- Only one proposed procedure was coded, though frequently others were mentioned. The most common cases were a CPES procedure preceded by a diagnostic procedure (e.g., arthroscopy/meniscectomy) or a CPES

procedure with a related procedure (tonsillectomy/adenoidectomy with myringotomy). When there were several procedures, the narrative was abstracted, the CPES procedure was coded, and a flag was added to indicate that an additional procedure was mentioned.

- While spaces were provided for the collection of information on the diagnostic tests ordered by the consultant, these data were found to be inconsistently reported (some consultants listed out all tests, others considered them part of the examination) and therefore unreliable. As a result, they were not coded or entered on the analysis file.

- The consultation outcome codes (confirmation and nonconfirmation) were originally set up as a binary choice. It soon became clear that there was much more depth to be captured from the consultant reports, as consultants frequently qualified their recommendations by making their confirmation contingent on a positive result of a test yet to be performed or on other factors (e.g., "weight loss by the patient"). They also sometimes confirmed the need for only part of a proposed procedure (e.g., "strip the veins on the left leg but not the right leg") or recommended an additional procedure (e.g., "remove the adenoids as well as the tonsils").

  It should be noted that this information was only sometimes relayed back to the proposing surgeon. In addition, the program itself interpreted each consultation as having a binary outcome possibility (approved or not approved), and reimbursement of the surgery was not made contingent on modifying the course of treatment in accord with the nuances of the consultant's recommendations. For analysis purposes, however, it was desirable to preserve this extra information, and therefore the format and procedures for completing the CRA were modified to accomplish this goal.

Following each data collection trip, the completed forms were brought back to the evaluation office for data reduction and assignment of clinical codes. These activities are described below.

Data Reduction and Cleaning. The intake form and CRA data were sorted and edited before being sent to data entry. Items documented as missing in the foundation files were assigned missing value codes. Also at this time, clinical codes were assigned to the proposed procedure and the diagnoses (proposing surgeon's and consultant's). At the outset of the project, these codes were assigned using the eighth revision of the International Classification of Disease (ICDA-8). Toward the end of the data collection, a decision was made to convert to the newer ninth revision (ICD-9-CM) in order to be able to capture as much of the detail in the data as possible. The analyses were performed at an aggregate "procedure category" level, so that the reconciliation of

individual codes across the two systems did not present a problem.

Following editing and assignment of clinical codes, the data were keyed to tape and verified by an outside vendor. The resulting data were merged into a file containing one record per participant and were cleaned using a variety of techniques, including range tests, allowable value tests, logic tests, and review of outliers. The hard copy forms were consulted to resolve the questions raised by these cleaning runs. Other data on the case were used to correct suspect values, if possible; if not, a missing value was assigned to the variable. A small number of cases were so fraught with unusable information that they were excluded from the analysis completely.

Every effort was made to retain cases if valid information could be salvaged. There were many instances of apparent data problems that turned out to be case irregularities that were based in actual fact:

- cases with three consultations;
- cases with a confirmation followed by a nonconfirmation;
- cases with a confirmation followed by a second confirmation;
- cases that met the desk audit criteria, then had a nonconfirming consultation; and
- cases that had a nonconfirming consultation, then met the criteria.

These types of cases were assigned their actual final disposition and included in the analysis as far as was possible without causing major problems.

A total of 4,718 unweighted cases--a sample of slightly less than half of all referrals for the period--was retained in the final analytic file.

Supplemental Physician Data. In order to provide additional information to be used in modeling the probability of confirmation/nonconfirmation and eventual surgery, secondary data on each individual physician were abstracted from available sources. In order to preserve physician anonymity, the abstractors worked at the foundation offices using two resource documents: the AMA Physician Reference Listing, 1976 and the Medical Directory of Massachusetts, 1979. All data available on each physician were copied onto transfer sheets along with the study identifier. (Table A.2 lists the data elements that were obtained.) This particular edition of the AMA listing was used because those published more recently did not provide birthdate or graduation year, both

Table A.2

MASSACHUSETTS CPES

SUPPLEMENTARY DATA OBTAINED ON PHYSICIANS

Provider code
Zip code
Primary specialty
Secondary specialty
Type of practice
Specialty board certification (primary)
Specialty board certification (secondary)
Specialty board memberships (up to 3)
Birth year
Medical school
Graduation year

hypothesized to be significant variables in the analysis. The Massachusetts directory was used only when a physician could not be located in the AMA listing; it provided data on primary specialty and graduation year only.

Use of these relatively dated sources of information did result in a lack of data on some physicians. Data on physicians new to the area, especially residents, were not available. Eventually, data were obtained on a total of 1,894 physicians, providing data on the consultant in 85 percent of the cases in the analysis file.

A.1.3 Massachusetts CPES—Surgery Outcomes Data

For a subsample of the participants in CPES for whom program data were abstracted for analysis, additional data were obtained to determine whether or not each participant underwent the surgery originally proposed within one year of his or her referral to the program. There are two potential approaches to obtaining this type of information. One is to approach the program participant and inquire directly; the other is to obtain secondary data on medical care utilization and to deduce whether the proposed surgery was among the services received.

The first approach has the advantage of directness and simplicity. Unfortunately, it also introduces several forms of differential and undesirable bias into the resultant data. Given the time lag between the events in question and the data collection (up to 30 months), a recall bias would result in the underreporting of surgery for earlier participants. There is also the question of whether respondents would have an accurate understanding of the specific procedure(s) that were performed. Finally, the quality of the data might also be affected by the patient's emotions regarding what might be a very sensitive part of their medical care history.

Using secondary data to make the determination raises other problems. Incompleteness of the records may prevent surgeries from being counted. Inaccuracies in procedure coding on the claims may cause some recording of "false" surgeries while other actual surgeries go undetected. However, the most fundamental problem is that each record supplies only limited information on the care provided, and provides it in terms designed to facilitate payment (e.g., "tonsillectomy with or without adenoidectomy") rather than to describe the actual procedure. Thus, even when a record is both complete and accurate, subjective judgment must frequently be used to determine whether the services received are actually equivalent to the procedure proposed. This approach does, however, have the advantage of lower cost per participant, permitting a larger sample to be included in the analysis.

Secondary data were chosen as the basis of the main analysis of surgery

decisions because the potential flaws in these data are assumed to be random (while misreporting in the data obtained from program participants directly would likely be correlated with program outcome, one of the variables being analyzed) and since its lower cost allowed a larger sample size.

The Medicaid claims history files at the Department of Public Welfare (DPW) were the source of the secondary data used. Using the data available at the beginning of March 1981, all claims for physician services rendered between the date of referral to the program and the end of November 1980 (the date at which bill submission delays and processing lags began to cast doubt on the completeness of the claims files used) were evaluated to determine if it appeared that the proposed surgery, or a related surgery for the same condition, had been performed.

Sampling. It was decided to collect these claims data for a subsample of the participants included in the program record analysis. A subsample size of 3,200 program participants was specified to supply good representation of the entire program population. This follow-up sample was stratified so as to contain 1,600 cases from each foundation type (personal consultation and desk audit) and 200 cases for each procedure within each foundation type. Sampling fractions were developed using observed average monthly utilization for each foundation; variance in actual program utilization and other factors caused the actual sample drawn to be larger than anticipated.

Table A.3 presents the sampling fractions that were used to select the follow-up sample.

Data Acquisition. Evaluation staff, again working at the foundation offices, abstracted the study case identifier,[6] the 14-digit Medicaid number, and three letters of the participant's last name.

Cases whose files had incomplete Medicaid numbers were sent to the Massachusetts Department of Public Welfare (DPW) for completion of the number through use of DPW microfiche recipient records.

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[6]At the Charles River foundation, the foundation's understanding of its agreement to participate is that no explicit link of the program record sample data to any Medicaid claims would be made without the explicit consent of the recipient (even though patient anonymity is maintained throughout the process as carried out at the other foundations). Therefore, it was insisted that a second blind identifier be assigned to each case for the purposes of this data collection, and that the link between the two identifiers be retained by the foundation only. Another irregularity at Charles River is the fact that no subsampling was performed; a census of the cases on which data had been abstracted was included in the surgery decision follow-up subsample.

Table A.3

MASSACHUSETTS CPES

SUBSAMPLING RATES (IN PERCENT) USED TO SELECT CASES FOR SURGERY DECISION ANALYSIS

Procedure	Foundation				
	Bay State	Central Massachusetts	Charles River	Pilgrim	Western Massachusetts
Tonsillectomy/adenoidectomy	73	29	100	25 criteria met, 100 other	20 criteria met, 28 other
Hysterectomy	86	26	100	55 criteria met, 58 other	40 criteria met, 53 other
Meniscectomy	92	36	100	41 criteria met, 53 other	100
Varicose vein ligation	61	59	100	100	100
Hemorrhoidectomy	100	100	100	100	100
Cholecystectomy	100	29	100	75 criteria met, 100 other	100
Laminectomy/disc excision	100	65	100	100	100
Submucous resection	100	56	100	100	100

In cases where it appeared that a single participant had more than one Medicaid number, both numbers were entered on the list. In this way, a single case ID might be entered on the list as corresponding to more than one Medicaid number. (The converse would occur when a single recipient had participated in the program more than once.)

The inquiry input file was cleaned and edited at the Bureau of Systems Operations, DPW. Attention was focused on those cases that had multiple IDs of either sort. While these types of cases could occur validly (as described above), they could also be due to coding or keying errors. Also examined were cases where an incomplete Medicaid number could not in fact be completed and was entered with embedded blanks. These were read as zeroes by the claims inquiry program, and it was necessary to verify that the resultant number was correct. The goal of cleaning the Medicaid number list was to verify that the number linked to each CPES case was the actual Medicaid ID for that participant. If the number were incorrect, it would either be an invalid number (i.e., no case had ever been assigned the number) or it would be a valid number for a different case.

To find and correct either type of error, demographic data (name, age, sex) on all of these recipients were obtained from the Medicaid Recipient Extract Master File. Cases with invalid IDs were identified by an error message produced by the routine and were dropped from the sample.[7] Similar demographic information was abstracted from the program record file data on the remaining cases. For each questionable case, the data were compared within each source and across the two sources to verify that all data linked to each case actually pertained to a single person.[8]

Claims Processing. The edited list of Medicaid IDs was used as input to a "Job 49" inquiry to obtain all claims records contained in the Medicaid master claims history file with dates of service after December 31, 1977, for each case. Earlier claims were not necessary because all cases in the analysis had program participation dates of May 1978 or later.

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[7]Schedule and resource constraints did not permit a return trip to the foundations to obtain further information.

[8]For the 441 Charles River cases in the subsample, the matching of age, sex, and birth date was later used as the basis for a "statistical" match of the referral and procedure data (from the program record file bearing the study identifier) to the claim history file (bearing the second blind identifier).

The raw output of the claims inquiry was a tape containing all records for the input recipients, a total of 317,137 records. From this file were deleted:

- all nonphysician claims (since only physician claims carry the procedure code which identifies any surgery that might have taken place);
- all claims for recipients ineligible at date of service; and
- all multiple claims for the same service (same recipient, same provider, same date of service and procedure).

The resultant file contained 106,453 claims records on 3,304 recipients.

The claims records for each program participant were merged with the data originally abstracted from the program files. A computerized routine compared referral date (or the earliest available complete date, if referral date was missing) and the proposed procedure (at an aggregate procedure group level, rather than individual procedure codes) with the claims history to determine if a CPES surgery (i.e., one of the procedure codes covered by the program within the same procedure group) had occurred within one year of program participation. In addition, a range of procedures was identified as "potentially related" to each of the eight CPES procedure groups. If no CPES procedure was observed within one year of program participation, any claims for "potentially related" surgery were printed out for manual review by a medical records technician. She assigned the case to one of the following categories:

- surgery unrelated to CPES condition; or
- related surgery (i.e., for same condition as proposed CPES procedure).

If the surgery was related, it was further coded as to:

- type of related surgery performed (diagnostic, therapeutic, both);
- extensiveness of related procedure relative to the proposed CPES procedure (no incision; less, equally, or more extensive; don't know); or
- injection only (or not).

Since each case was assigned to a single surgery category, conventions were established for making that assignment when a case met more than one of the criteria.

- If a CPES surgery occurred within the one-year follow-up period, no related surgery was considered even if it occurred before the CPES surgery.
- If no CPES surgery occurred, but a related surgery did occur, the case was assigned to the "related surgery" category. In cases of multiple related surgeries, the type and extensiveness of related surgery variables were assigned the values for the earliest occurring related surgery.

Eligibility Tests. In considering each program participant's claim history to determine whether or not he or she had undergone the proposed surgery, it was necessary to verify continued enrollment in the Medicaid program. Only in this way could it be ascertained that the absence of surgery claims was due to forgone surgery and not to discontinued participation in the Medicaid program.

For this purpose, an extract of the Recipient Extract Master File was run for all the cases in the sample. This produced a file containing the enrollment history of each person in the form of a header record for each person and a trailer record for each category of assistance in which they had been enrolled. These trailer records, showing the start and end dates of the two most recent periods of eligibility in each category,[9] were used to construct a profile of program enrollment for each recipient. The date of referral was plotted against this time line, and all participants who failed to have one year of uninterrupted enrollment following referral (566 cases) were excluded from the analysis.[10] The desire to maintain a minimum follow-up period of one year also led to the exclusion of 973 cases with referral later than November 30, 1979, since the claims data were available on services through November 30, 1980, only. The final sample for which data were analyzed was 1,094 cases. These were weighted with the inverse of both the follow-up subsampling fractions and the original program record sampling fractions. The resulting file of 4,920 cases was used to estimate the proportion of cases undergoing surgery, as discussed in Volume II, Section 3.5; the tables in that section also show the unweighted number of cases on which these estimates are based.

Life Table Analysis. Life table analysis of the estimated rates of surgery for the two foundation models was conducted in order to estimate the probability of surgery at the end of a 34-month follow-up period. The plots presented in Volume II, Section 3.5 are based on the life tables presented as Tables A.4, A.5, and A.6. These tables do not include cases that cancelled out of the program, nor do they consider cases resulting only in diagnostic procedures as cases having undergone surgery.

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[9] A qualification to the information provided is that, in the case of multiple periods of enrollment in a single category, the information on the earlier enrollment is lost; however, every time there is a hiatus of six months or longer, a new trailer record is established upon renewal of eligibility even if the recipient had an existing trailer for that category.

[10] A number of these cases were found to be ineligible at the date of referral. This could be due to a problem of Medicaid numbers originally miscoded at the foundations and mistaken identity in the claims inquiry, though the sex and date of birth comparisons would seem to preclude this. This is an area that bears further investigation.

Table A.4

MASSACHUSETTS CPES

LIFE TABLE FOR SURGERY: ALL FOUNDATIONS

Time after program contact (in 2-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	1641	0	4919	4919.0	0.333604	0.000000
1	1922	0	3278	3278.0	0.586333	0.333604
2	211	0	1356	1356.0	0.155605	0.724334
3	94	0	1145	1145.0	0.082096	0.767229
4	14	0	1051	1051.0	0.013321	0.786339
5	5	0	1037	1037.0	0.004822	0.789185
6	11	18	1032	1023.0	0.010753	0.790201
7	3	150	1003	928.0	0.003233	0.792457
8	19	152	850	774.0	0.024548	0.793128
9	4	74	679	642.0	0.006231	0.798206
10	2	105	601	548.5	0.003646	0.799464
11	4	149	494	419.5	0.009535	0.800195
12	8	52	341	315.0	0.025397	0.802100
13	0	129	281	216.5	0.000000	0.807126
14	0	85	152	109.5	0.000000	0.807126
15	0	55	67	39.5	0.000000	0.807126
16	0	11	12	6.5	0.000000	0.807126
17	0	1	1	0.5	0.000000	0.807126

Source: Estimated from Medicaid claims histories on a sample of participants, May 1978 to November 1979.

Table A.5

MASSACHUSETTS CPES

LIFE TABLE FOR SURGERY: PERSONAL CONSULTATION FOUNDATIONS

Time after program contact (in 2-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	498	0	2151	2151.0	0.231520	0.000000
1	1001	0	1653	1653.0	0.605556	0.231520
2	98	0	652	652.0	0.150307	0.696885
3	53	0	554	554.0	0.095668	0.742445
4	3	0	501	501.0	0.005938	0.767085
5	4	0	498	498.0	0.008032	0.768480
6	8	13	494	487.5	0.016410	0.770339
7	2	62	473	442.0	0.004525	0.774108
8	14	86	409	366.0	0.038251	0.775130
9	2	52	309	283.0	0.007067	0.783732
10	0	53	255	228.5	0.000000	0.785260
11	0	32	202	186.0	0.000000	0.785260
12	8	20	170	160.0	0.050000	0.785260
13	0	54	142	115.0	0.000000	0.795997
14	0	41	88	67.5	0.000000	0.795997
15	0	40	47	27.0	0.000000	0.795997
16	0	7	7	3.5	0.000000	0.795997
17	0	0	0	0.0	.	0.795997

Source: Estimated from Medicaid claims histories on a sample of participants, May 1978 to November 1979.

Table A.6

MASSACHUSETTS CPES

LIFE TABLE FOR SURGERY: DESK AUDIT FOUNDATIONS

Time after program contact (in 2-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	1134	0	2652	2652.0	0.427602	0.000000
1	922	0	1518	1518.0	0.607378	0.427602
2	111	0	596	596.0	0.186242	0.775264
3	16	0	485	485.0	0.032990	0.817119
4	11	0	469	469.0	0.023454	0.823152
5	1	0	458	458.0	0.002183	0.827300
6	0	5	457	454.5	0.000000	0.827677
7	1	74	452	415.0	0.002410	0.827677
8	6	61	377	346.5	0.017316	0.828092
9	2	22	310	299.0	0.006689	0.831069
10	0	48	286	262.0	0.000000	0.832199
11	4	83	238	196.5	0.020356	0.832199
12	0	28	151	137.0	0.000000	0.835615
13	0	72	123	87.0	0.000000	0.835615
14	0	41	51	30.5	0.000000	0.835615
15	0	6	10	7.0	0.000000	0.835615
16	0	3	4	2.5	0.000000	0.835615
17	0	1	1	0.5	0.000000	0.835615

Source: Estimated from Medicaid claims histories on a sample of participants, May 1978 to November 1979.

Qualifications. Certain limitations of the data base must be noted in considering this analysis. The estimates of the incidence of surgery are based solely on claims submitted for payment, and Medicaid claims histories are generally conceded to be imperfect sources of utilization history. For the purpose of this analysis, some of the more serious potential problems in the claims files are:

- inaccuracy in the procedure codes on bills submitted such that a surgery is not counted or such that a "false surgery" is counted;
- inaccuracy of the coding of the date of service for surgeries such that they are perceived in an incorrect chronological relationship to program referral or to the period of the analysis; and
- failure to include claims for surgeries that have taken place.

Occurrences of the first two problems can skew the estimates in either direction; assumed to be random error, it is expected that the net effect is a reduction in the precision of the estimate of the proportion of participants obtaining surgery, rather than a differential bias in the estimated probability for any specific participant group.

It could be argued that miscoding on the part of providers may be intentional (to maximize reimbursement) rather than merely random error. This contention was not supported by program staff. It could also be hypothesized that there is some incidence of intentional miscoding to sidestep program requirements, i.e., coding a program procedure with a nonprogram procedure code or with an emergency surgery prefix (also exempt from the program). This hypothesis was not supported by program staff or by the provider community and was not specifically tested. No evidence received to date has supported a trend of intentional use of non-CPES procedure codes for CPES procedures, but it would be impossible, without examining operative notes and/or the patients, to determine positively whether or not this is taking place. It is expected that if it were, a procedure code for a related procedure would be used and an outcome of "related surgery" would be assigned to the case for this analysis. Furthermore, the erroneous use of the "29" emergency surgery prefix would also have no effect on the surgery estimates; it is, in fact, another qualification to the reported estimates that the data contain emergency surgeries. These were included because the use of the prefixes was reported to be so inconsistent that all claims carrying the relevant four-digit procedure codes were included in the investigation of participants' outcomes, regardless of prefix.

The last problem, that of missing claims, is the one that bears the most consideration. The claims files are commonly alleged to be incomplete, with one frequently cited class of missing surgery claims being operations performed by residents and staff physicians. (These physicians do not submit bills for surgery performed; rather,

their costs are included in the hospitals' per diem reimbursement.) However, Medicaid program and hospital staff have noted that a supervising or attending physician will almost always bill for the surgery. The DPW analysis of 2,501 CPES participants in the Central Massachusetts and Bay State foundations found 161 with a hospitalization with no accompanying physician bill within six months of program participation; of these, 77 were found (through medical record review) to have undergone CPES surgery during the stay. This represents 4 percent of all participants determined to have had surgery within six months of referral, or 3 percent of the total of participants for the period. While the current analysis did not have the same access to hospital records, the claims were defined so as to include a wider range of claims than did the DPW inquiry; this increased the likelihood that a surgery for which no surgeon's bill was submitted might be "represented" in the counts by an anesthetist bill or some other related bill.

A second group of missing claims are those by surgeons who reputedly do not bother to bill Medicaid for surgery because the amount reimbursed does not justify the paperwork. It might be suggested that program requirements represent yet another burden of participation. (Such an effect would likely vary across procedures, since the reimbursement for the range of CPES procedures extends from under twenty dollars to several hundred dollars.) This potential problem was not specifically addressed by the analysis because it is assumed to be uncommon.

A.1.4 Massachusetts CPES - Patient Survey Data

In order to assess the impacts of the Massachusetts CPES on the degree to which participants obtain second opinions, as well as the effects of the second opinions obtained on participants' surgery decisions, a sample of program participants and a sample of comparison patients were contacted and interviewed. The participant sample was a random sample of persons referred to the program during a specified time period. Because the program was ongoing, it was not possible to implement a randomized treatment/control experimental design to obtain comparison patients in Massachusetts. Rather, this group was comprised of a group of Connecticut Medicaid recipients whose physicians had proposed one of the CPES-covered procedures during the same period. The process by which these groups were identified and the process by which the survey was conducted are described in this section.

Identification of the Survey Samples. Identification of the Connecticut comparison sample was the most challenging aspect of the sample selection. The goal was to identify a group of persons in Connecticut who were as equivalent as possible to CPES participants in Massachusetts. As noted above, participants in the CPES are

recipients proposed for one of the covered procedures who have no other inpatient coverage or HMO membership. While existing program records in Connecticut could provide some basic information on recipient characteristics (such as age, sex, and program enrollment history) and the use of services, they could not provide one crucial piece of information, that is, whether a particular recipient's physician had proposed one of the procedures covered by the CPES. This information could come only from contact with the recipients themselves, which was accomplished by means of a telephone survey.

The sample for this initial telephone survey was a random sample of Connecticut Medicaid recipients selected from program records. The criteria for inclusion in the sample were continuous enrollment during the survey recall period and apparent eligibility for the CPES (i.e., being enrolled in categories of assistance assumed to have little insurance coverage). As noted above, there were no HMOs enrolling Medicaid recipients in Connecticut during this period. Because a recommendation for one of the CPES procedures was expected to be a rare event,[11] the probability of identifying one at any given interview was increased by using a cluster sample approach (collecting information on all eligible members of a household from a single respondent) and by using the longest possible recall period (i.e., inquiring about all recommendations that were received over a 16-month period).

A total of 17,025 cases were drawn from Medicaid records. Cases (households) were assigned random numbers and were released for interview in random-number order until the target sample of recommendations for a CPES surgery (250) had been obtained.

Before this telephone survey could begin, it was necessary to obtain telephone numbers for these households. This was accomplished by two approaches. First, the name and address listed in the Medicaid file were looked up in the relevant telephone directory and, if not found, were given to directory assistance. This approach did not have great success; numbers were obtained for only 27 percent of the households in this way. In order to obtain numbers for the remaining households, the recipients' files at the Connecticut Department of Income Maintenance (DIM) were consulted. It was acknowledged that many recipients might not have telephones and that some that did might prefer to have unlisted numbers. However, since all were required to provide a number through which they could be reached at their semiannual redeterminations of eligibility

[11] As described in Volume II, Section 3.8, the monthly incidence of CPES surgery among the Connecticut "CPES-equivalent" population was between 50 and 175 per 100,000; the rate of recommendations for surgery would, of course, be somewhat higher.

and benefits, it was assumed that the files, especially the redetermination forms, would prove to be a valuable source of information. Project staff worked in the district offices and sub-offices of the DIM. While numbers were not obtained for all cases, the proportion for whom numbers were available was increased to 62 percent.

The telephone survey was conducted from the Abt Associates telephone survey center; the instrument used is presented as Exhibit E.3 in Appendix E. As noted above, the interviewer obtained information on all CPES procedures recommended to all "CPES-eligible" members of the household from January 1980 through the time of the survey (April-May 1981). Most of the procedures were described in simplified terms to be sure that the respondents would understand what was being discussed, e.g., "Back operation for a ruptured or slipped disc" as opposed to "laminectomy" and "gall bladder removal" in place of "cholecystectomy."

A total of 4,500 households were contacted in order to obtain 248 recommendations for CPES procedures in 209 households. These cases constituted the comparison sample for the patient interview survey.

In Massachusetts, all participants were known to have been recommended for one of the eight CPES procedures, and no survey was needed. In order to be comparable to the Connecticut cases, the Massachusetts sample was selected from cases referred to the program between January 1980 and April 1981.

Not all cases were included in the universe from which the sample was selected:

- The foundation that administers the program in the smallest of the five program areas (Charles River) declined to release the names of program participants, in spite of the fact that the legal staff of the Department of Public Welfare had ruled that this was permissible. Because of this, no cases from that area could be included.

- It was felt that cases that received program waivers were unlikely to have been affected by the program; quite possibly, these patients might not even have known that their case had been reviewed. Therefore, it was decided to exclude them from the survey so that the limited resources available for the survey could be devoted to areas of possible program effect.

- The first stage of the elimination of cholecystectomy from the program began in April 1981, when the foundations were directed to grant an automatic waiver to any case referred for the procedure. Therefore, all cholecystectomy referrals that month were excluded from the sampling universe.

- At the Pilgrim foundation, desk audit criteria for tonsillectomy/adenoidectomy and submucous resection were eliminated on January 14, 1980. To avoid complicating the sample, all cases referred to Pilgrim for these procedures between January 1 and January 14, 1980, were excluded from the sampling universe.

- The cases classified by the foundations as having cancelled out of the program were divided into two categories. The first, those patients who seemed to have decided not to participate in the program, were included in the sampling universe. The second, those who dropped out because it was discovered that they should not have been there in the first place (because of other insurance coverage, entitlement under General Relief--no inpatient benefits--or having been proposed for a non-CPES procedure) were excluded from the universe.

A sample was designed, stratified by proposed procedure, program model (personal consultation or desk audit) and disposition at initial program contact (confirming second opinion, cancellation). Sample fractions for each cell were determined by dividing the target sample (plus an allowance for sample loss due to problems in locating respondents) by the total number of cases in each cell, as available from data on total program utilization during the period developed from the foundations' monthly reports to DPW (see Section A.1.1). A few problems resulted from this approach, when the number of cases in the foundations' files did not correspond to the data in the monthly reports; however, only minor adjustments to the sample were required.

Once the sampling fractions were established for each cell, project staff working at the offices of the four participating foundations selected the appropriate random sample of cases from all cases referred to the foundation during the subject period and abstracted the information needed to contact the patient and a few other items of information used to facilitate the interview. (See Appendix E, Exhibit E.4.)

Fielding the Survey. It was considered desirable to delay the interviews of patients who had undergone surgery or medical treatment until a point when they had completely recovered from the effects of the intervention and had attained a final outcome, in order to obtain useful post-treatment data on patient health and functional status. The physician subcontractors at the University of Michigan were charged with the task of specifying the appropriate waiting time for each of the program procedures.

For some of the procedures (such as hemorrhoidectomy), this was felt to be a relatively short time after treatment (one month); for others (such as tonsillectomy/adenoidectomy), it was felt that the effect of the treatment was not apparent until as much as a year had elapsed. (The interval specified for each of the procedures is presented in Table A.7.) In order to allow a reasonable comparison of the health and function of patients who had not undergone surgery with those who had, it was desirable

Table A.7

MASSACHUSETTS CPES

FOLLOW-UP INTERVALS FOR SCHEDULING PERSONAL INTERVIEWS WITH PROGRAM PARTICIPANTS AND COMPARISON PATIENTS

Procedure	Cases with surgery	Cases where surgery was only discussed
Hemorrhoidectomy	1	2
Cholecystectomy	6	7
Tonsillectomy and/or adenoidectomy	12	13
Hysterectomy	6	7
Ligation/excision of varicose veins	6	7
Meniscectomy	12	13
Lumbar laminectomy for disc excision	6	7
Submucous resection	6	7

to interview them at a similar point in their treatment experience. However, while the surgery patients had the date of the operation from which to count the recovery interval, the other patients had only the date of the recommendation of surgery. It was estimated that, on the average, about a month elapses between the date of a proposal for surgery and the operation itself; therefore, in scheduling the interviews with nonsurgery patients, it was decided that one month would be added to the recovery intervals specified for the procedure for which they had been recommended, and that this expanded interval would be counted from the date on which they were initially recommended for surgery.

This concept was operationalized differently for the two sites. In Connecticut, where all respondents (or members of their households) had already participated in the initial telephone survey, it was known that 148 cases had already had surgery and on what date. These cases were released to the field shortly before the appropriate date for the interview, based on the date of the surgery reported on the initial survey. Cases for which only a recommendation of surgery had been reported at the initial contact were recontacted shortly before their scheduled interview date (based on the date of the original recommendation). If it happened that the respondent's status had changed since the initial telephone survey (i.e., they had undergone the surgery in the interim), the date of the operation was obtained and the interview was rescheduled to take place at the appropriate interval after the operation. If not, the case was released to the field immediately.

In Massachusetts, where the potential respondents had been identified only from CPES program records, it was deemed necessary to verify our ability to contact them to solicit their cooperation in the project, and to ascertain if and when surgery had taken place. Respondents with whom this telephone follow-up interview was successfully completed became the sample for the personal interviews; therefore, cases in each sampling cell were released until the specified sample for the cell had been reached. A few minor adjustments to the sample were required when insufficient numbers of respondents could be obtained in a particular cell; in most of these cases, the equivalent procedure/outcome cells at two foundations of the same type (personal consultation or desk audit) were combined into a single cross-foundation cell.

For respondents from three of the foundation areas, these follow-up calls were conducted from the Abt Associates telephone survey center; in the fourth area, the foundation insisted that a foundation employee make the calls, so that the potential respondents could agree to participate in the study before their names and telephone numbers were released to the evaluation. A total of 1,037 cases were released for telephone follow-up; 496, or 48 percent, were successfully contacted.

The personal interviews were conducted by trained interviewers employed by four local field services. The interviews averaged between 45 and 90 minutes and were conducted in the home with the patient for whom surgery was recommended, except for those cases where the patient was under age 18 at the time of the interviews; in those cases, it was conducted with a parent or guardian who had accompanied the patient on all doctor visits and was involved in the decisions regarding the patient's surgery. (In cases where the patient was between ages 12 and 17 at the time of the interview, they were asked to respond to specific subsets of questions requiring subjective responses, such as the extent of pain).

Interviewing began in June 1981 and was completed in October 1982. The overall completion rate for the survey was 75 percent.

Information Collected. The survey instrument was comprised of 165 questions organized into 8 modules (see Appendix E, Exhibit E.5). The first four sections dealt with respondents' experiences with up to four physicians that they had seen. All four modules covered the respondent's condition at the time of the visit to the physician, the information received during that visit (including the physician's diagnosis and recommendations regarding surgery and other treatments), and the respondent's intentions regarding surgery following the visit.

The modules dealing with the second, third, and fourth physicians (including question sequences that were asked only if that physician was seen for a second opinion) excluded any physician to whom the respondent had been sent by another physician. These questions covered the respondent's status before seeing the second opinion physician and dealt with such areas as the degree of certainty of their intentions regarding surgery, how informed they felt, and what they anticipated to be their ultimate outcome with surgery and without it. They also covered the respondents' familiarity with second opinions and second opinion programs, their sources of information about them, their assessment of the impact of the existence of the program on the likelihood of their obtaining a second opinion, and their assessment of the impact of the second opinion on heir ultimate decision regarding surgery. A subset of these questions was duplicated as the fifth section of the questionnaire, which was asked only of those patients who had not obtained a second opinion.

The sixth, seventh, and eighth modules of the instrument were asked of all respondents. The sixth dealt with their status at the point when they were making their final decision regarding surgery, after they had seen all of their physicians. It repeated the earlier questions regarding respondents' assessments of their level of information, perception of risk, and expectation of outcomes with and without surgery. The seventh

section covered their actual outcome, including the details of the surgery or other treatment they had chosen and their health and functional status at the time of the interview compared to their status at the time of their recommendation for surgery. The latter portion of this section, and all of the eighth section, covered the respondents' general health and health attitudes, the costs of their treatment and their insurance coverage, and miscellaneous demographic characteristics (age, marital status, education, income, ancestry, etc.).

In addition to the questionnaire, which was administered by the interviewer, respondents recommended for selected procedures completed a self-administered, condition-specific supplement measuring the nature and extent of their symptoms before and after treatment. (Exhibit E.6 in Appendix E shows the type of information collected.) They were also asked to sign a form granting the project permission to access their Medicaid program records, and a second form granting the project permission to contact their physician(s) and for the physician(s) to release information to the evaluation. About 92 percent of the respondents granted access to their Medicaid records, while 97 percent consented for the project to contact their physician(s).

Processing the Data. The completed survey questionnaires were edited, coded, entered, and verified by the Abt Associates survey research group using standard methods. Codes were constructed for selected items with open-ended response categories; allowable values tests and cross-item consistency tests were used to verify that the instrument had been administered and entered correctly. The clinical data--the patient-reported diagnosis(es) and surgical procedure(s)--were coded by a trained medical records technician according to the ICD-9-CM[12] classification.

Weighting the Massachusetts Data for Analysis.[13] As described in Volume II, Section 3.7, analysis of the survey sample revealed a small, systematic response bias: program participants who had "followed the instructions" of their physicians (i.e., those who had undergone surgery after recommendations by their physicians and those who had forgone surgery after a nonconfirmation) were more likely to have completed the interview than those who had not. To offset this bias, cases in each category were

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[12] International Classification of Diseases, 9th Revision - Clinical Modification.

[13] As noted in Volume II, Section 3.10.2, the Connecticut survey data were found to differ systematically from the Massachusetts sample; the survey data collected were not utilized in the analyses.

weighted differentially in order to assign them weights proportional to their distribution in the survey sample. This was accomplished as follows.

Each of the 365 completed interviews represents one observation that falls into a cell of an 8 x 2 table in one of four outcome groups (confirmed, nonconfirmed, canceled, criteria met). Observations were weighted separately for each of the four groups. Because population totals for each of the eight program procedures are available, population marginals are known for the rows for each table. But population numbers undergoing and not undergoing surgery are unavailable and must be estimated for each outcome group. This was accomplished by multiplying the ratio of population to followups within a procedure stratum by the number of followups in the stratum undergoing surgery and summing across strata. That is,

$$N_{surg} = \sum_{s=1}^{8} \frac{C_s}{F_s} F_{s,surg}; \quad F_{s,surg} + F_{s,no\ surg} \equiv F_s$$

where N_{surg} is the estimated population number undergoing surgery, C_s is the population total in procedure stratum s, F_s is the number of follow-up respondents in procedure stratum s and $F_{s,surg}$ is the number of telephone follow-up respondents in procedure stratum s who underwent surgery. Replacing $F_{s,surg}$ with $F_{s,no\ surg}$ yields an estimate of the number not undergoing surgery. By construction, $N_{surg} + N_{no\ surg}$ equals the population of the outcome group. The numbers N_{surg} and $N_{no\ surg}$ are estimates of the population column marginals we seek.

Using the population row marginals and the estimated population column marginals, the cell frequencies in each of the four tables were weighted using the "raking-ratio" technique. The procedure, developed by Deming and Stephan (1940) and described by Bishop et al. (1975), yields weights for each observation to reflect the magnitude of its procedure stratum and surgery outcome in the population while reproducing population row and column marginals. The weights assigned by the raking technique appear in Tables A.8 to A.11 as "Weight 1." The weights denoted "Weight 2" are these same weights multiplied by the ratio of completed interviews in the outcome group to the population of the group. Thus the sum of the cell entries in an outcome group weighted by Weight 2 equals the number of completed interviews in the group.

A.1.5 Massachusetts CPES — Determining the Effect of the CPES on Participant Surgery Decisions

One of the central questions to be addressed with the data collected by the survey was the extent to which the CPES affects the surgery decisions of its par-

Table A.8

MASSACHUSETTS CPES

CALCULATION OF SAMPLING WEIGHTS ASSIGNED TO SURVEY DATA FOR ANALYSIS:
CASES WITH INITIAL CONFIRMATION

Procedure	Foundation	Surgery status								Interview marginal	Stratum weight	Population marginal
		Surgery				No surgery						
		Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2	Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2			
Tonsillectomy/adenoidectomy	Bay State/Central	24	31	40.53	1.90	1	4	54.60	2.56	25	29.2	1,021
Hysterectomy	Bay State/Central	21	28	15.86	0.94	3	4	21.37	1.00	24	12.2	390
Submucous resection	Bay State	10	12	9.47	0.44	1	1	12.76	0.60	11	8.2	106
Submucous resection	Central Mass.	2	6	13.67	0.64	2	2	18.42	0.86	4	7.5	60
Varicose veins ligation	Bay State/Central	5	6	15.80	0.70	0	0	-	-	5	14.0	84
Hemorrhoidectomy	Bay State/Central	2	2	20.10	0.94	0	0	-	-	5	18.0	108
Cholecystectomy	Bay State	10	14	15.10	0.74	2	2	20.33	0.95	12	11.7	187
Cholecystectomy	Central Mass.	3	6	10.73	0.50	1	1	14.45	0.68	4	6.4	45
Laminectomy	Bay State/Central	2	4	28.60	1.34	0	0	-	-	2	16.0	64
Meniscectomy	Bay State/Central	5	6	19.30	0.90	0	0	-	-	5	18.0	108
Tonsillectomy/adenoidectomy	Pilgrim/Western	16	21	34.31	1.61	1	2	46.23	2.17	17	25.7	590
Hysterectomy	Pilgrim/Western	12	14	10.00	0.47	1	2	13.48	0.63	13	8.25	132
Submucous resection	Pilgrim/Western	7	9	9.52	0.45	1	2	12.83	0.60	8	7.1	78
Varicose veins ligation	Pilgrim/Western	1	1	15.04	0.71	1	1	20.26	0.95	2	16.5	33
Hemorrhoidectomy	Pilgrim/Western	2	3	13.85	0.65	0	0	-	-	2	10.3	31
Cholecystectomy	Pilgrim	1	1	0.90	0.04	0	0	-	-	1	1.0	1
Laminectomy	Pilgrim	1	2	6.30	0.30	0	0	-	-	1	3.5	7
Meniscectomy	Pilgrim/Western	1	1	1.82	0.09	1	1	2.46	0.12	2	2.0	4
Estimated population marginal		2667.1				318.9						
Total		125	167	-	-	15	22	-	-	140	-	2,986

Notes: (1) Stratum weight = $\frac{C_s}{F_s}$. See text.

(2) Procedure/foundation combinations that do not appear are those for which no referrals were received during the period.

Table A.9

MASSACHUSETTS CPES

CALCULATION OF SAMPLING WEIGHTS ASSIGNED TO SURVEY DATA FOR ANALYSIS:
CASES WITH INITIAL NONCONFIRMATION

Procedure	Foundation	Surgery status								Interview marginal	Stratum weight	Population marginal
		Surgery				No surgery						
		Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2	Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2			
Tonsillectomy/adenoidectomy	Bay State	1	3	4.65	1.54	8	10	4.27	1.41	9	2.9	38
Tonsillectomy/adenoidectomy	Central Mass.	5	9	3.24	1.07	5	7	2.97	0.98	10	1.9	30
Hysterectomy	Bay State	8	10	3.26	1.08	13	8	2.99	0.99	21	2.3	63
Hysterectomy	Central Mass.	2	3	2.86	0.94	1	1	2.62	0.87	3	2.0	8
Submucous resection	Bay State	4	4	3.97	1.31	6	10	3.64	1.20	8	2.2	29
Submucous resection	Central Mass.	4	4	2.98	0.98	1	2	2.73	0.90	5	2.3	14
Varicose veins ligation	Bay State/Central	4	4	2.98	0.98	1	1	2.73	0.90	5	2.8	14
Hemorrhoidectomy	Central Mass.	0	0	-	-	1	1	1.12	0.37	1	2.0	2
Cholecystectomy	Bay State/Central	1	2	3.01	0.99	3	3	2.76	0.91	4	2.2	11
Laminectomy	Bay State/Central	0	1	-	-	3	3	1.76	0.58	3	2.3	9
Meniscectomy	Bay State/Central	3	3	2.79	0.92	2	3	2.56	0.85	5	2.2	13
Tonsillectomy/adenoidectomy	Pilgrim	3	3	2.19	0.72	8	9	2.01	0.66	11	1.8	22
Tonsillectomy/adenoidectomy	Western Mass.	3	5	5.40	1.78	3	4	4.96	1.64	6	3.3	30
Hysterectomy	Pilgrim/Western	7	8	2.60	0.86	5	5	2.38	0.79	12	2.2	29
Submucous resection	Pilgrim	2	2	2.73	0.90	4	5	2.50	0.83	6	2.1	15
Varicose veins ligation	Pilgrim/Western	1	1	0.95	0.31	-	-	-	-	1	2.0	2
Hemorrhoidectomy	Pilgrim/Western	0	0	-	-	1	1	3.46	1.14	1	6.0	6
Meniscectomy	Pilgrim/Western	1	1	1.79	0.59	0	0	-	-	1	4.0	4
Estimated population marginal		144.8				194.2						
Total		47	62	-	-	65	83	-	-	112	-	339

Notes: (1) Stratum weight = $\frac{C_s}{F_s}$. See text.

(2) Procedure/foundation combinations that do not appear are those for which no referrals were received during the period.

Table A.10

MASSACHUSETTS CPES

CALCULATION OF SAMPLING WEIGHTS ASSIGNED TO SURVEY DATA FOR ANALYSIS:
CASES WITH INITIAL CANCELLATION

Procedure	Foundation	Surgery status								Interview marginal	Stratum weight	Population marginal
		Surgery				No surgery						
		Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2	Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2			
Tonsillectomy/adenoidectomy	Bay State/Central	3	3	22.55	2.14	2	6	27.71	2.63	5	12.2	110
Hysterectomy	Bay State/Central	3	6	13.18	1.25	1	2	16.19	1.53	4	6.25	50
Submucous resection	Bay State/Central	1	2	7.21	0.68	3	4	8.87	0.84	4	5.0	30
Varicose veins ligation	Bay State	0	0	-	-	1	1	5.44	0.52	1	9.0	9
Hemorrhoidectomy	Bay State	1	1	3.55	0.34	0	0	-	-	1	7.0	7
Cholecystectomy	Bay State/Central	1	3	3.61	0.34	3	4	4.43	0.42	4	2.1	15
Laminectomy	Bay State	1	1	3.55	0.34	0	0	-	-	1	7.0	7
Meniscectomy	Bay State/Central	1	1	10.19	0.97	0	0	-	-	1	20.2	20
Tonsillectomy/adenoidectomy	Pilgrim/Western	1	3	11.54	1.09	3	4	14.19	1.35	4	6.9	48
Hysterectomy	Pilgrim/Western	1	1	4.02	0.38	1	1	4.95	0.47	2	4.0	8
Submucous resection	Pilgrim/Western	0	0	-	-	3	3	3.06	0.29	3	5.0	15
Varicose veins ligation	Pilgrim/Western	0	1	-	-	0	1	-	-	-	-	3
Hemorrhoidectomy	Pilgrim/Western	0	0	-	-	1	1	2.49	0.24	1	4.0	4
Laminectomy	Western Mass.	0	0	-	-	0	1	-	-	-	-	1
Estimated population marginal		149.2				173.8						
Total		13	22	-	-	18	28	-	-	-	-	327

Notes: (1) Stratum weight = $\frac{C_s}{F_s}$. See text.

(2) Procedure/foundation combinations that do not appear are those for which no referrals were received during the period.

Table A.11

MASSACHUSETTS CPES

CALCULATION OF SAMPLING WEIGHTS ASSIGNED TO SURVEY DATA FOR ANALYSIS:
CASES MEETING DESK AUDIT CRITERIA

Procedure	Foundation	Surgery status								Interview marginal	Stratum weight	Population marginal
		Surgery				No surgery						
		Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2	Completed personal interviews	Completed telephone follow-ups	Weight 1	Weight 2			
Tonsillectomy/adenoidectomy	Pilgrim/Western	19	27	19.54	1.44	3	5	21.15	1.56	22	13.4	429
Hysterectomy	Pilgrim	9	11	11.62	0.86	1	1	12.57	0.93	10	9.7	116
Hysterectomy	Western Mass.	5	10	21.88	1.62	1	3	23.68	1.75	6	10.1	131
Submucous resection	Pilgrim/Western	11	13	7.43	0.55	4	5	8.04	0.59	15	6.2	111
Varicose veins ligation	Western Mass.	2	2	3.68	0.27	1	1	3.98	0.29	3	3.7	11
Cholecystectomy	Pilgrim/Western	17	19	10.93	0.81	3	3	11.82	0.87	20	9.9	218
Laminectomy	Pilgrim/Western	2	3	15.65	1.16	0	0	-	-	2	12.3	37
Meniscectomy	Pilgrim/Western	4	4	12.05	0.89	0	0	-	-	4	14.25	57
Estimated population marginal		939.6				171.4						
Total		69	89	-	-	13	18	-	-	82	-	1110

Notes: (1) Stratum weight = $\frac{C_s}{F_s}$. See text.

(2) Procedure/foundation combinations that do not appear are those for which no referrals were received during the period.

ticipants. Section 3.7.1 (in Volume II) derives estimates of this effect based on patients' appraisal and evidence of their changes in plans regarding surgery. For the purpose of this analysis, it was assumed that the program could have had one of four possible effects on the participant:

- respondent was unaffected by program;
- respondent changed plans and underwent surgery as the result of experience with the program;
- respondent changed plans and did not undergo surgery as the result of experience with the program; or
- effect of program experience could not be determined.

The survey data were used to allocate respondents to one of these four categories according to the following rules:

Rule 1. Respondents who were approved for surgery by meeting a set of criteria in a desk audit foundation did not obtain a second opinion through the program. Many were probably unaware that they had participated in the program. Hence this group was declared unaffected by the program, by assumption.

Rules 2 through 5 rely on answers to the following questions from the interview form.

12. After talking with (FIRST DOCTOR) in (FIRST REFERENCE MONTH), did you think that you would have surgery to treat your condition in the near future? (yes, no)

15. Since your (FIRST REFERENCE MONTH) discussion with (FIRST DOCTOR) about surgery, have you had an operation for your (CONDITION)? (yes, no)

40. After talking with (SECOND DOCTOR) in (SECOND REFERENCE MONTH) did you think that you would have surgery to treat your condition in the near future? (yes, no)

44. If you had not obtained a second opinion, do you think that you ...

    1. definitely would have made the same decision?
    2. probably would have made the same decision?
    3. probably would not have made the same decision?
    4. definitely would not have made the same decision?

Rule 2. If the respondent answered 'no' to questions 12, 15, and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 1 or 2 to question 44, then the respondent was judged to be unaffected by the program.

Rule 3. If the respondent answered 'yes' to questions 12, 15, and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 1 or 2 to question 44, then the respondent was judged to be unaffected by the program.

Rule 4. If the respondent answered 'no' to question 12 and 'yes' to questions 15 and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 3 or 4 to question 44, then the respondent was judged to have changed plans and to have undergone surgery because of the program.

Rule 5. If the respondent answered 'yes' to question 12 and 'no' to questions 15 and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 3 or 4 to question 44, then the respondent was judged to have changed plans and to have forgone surgery because of the program.

Rules 1 through 5 failed to classify 109 observations, or 29.9 percent of the sample. In nearly every instance this failure can be attributed to one of the following situations.

- Contradictory responses. Some respondents, for example, reported that they planned on surgery after their initial visit and did not plan on surgery after they visited the consultant physician (thus indicating a change of plans) but also reported that they would have made the same decision in the absence of a second opinion.

- Failure to undergo planned surgery. Some respondents who planned on surgery through two or more physician visits never report having the surgery. This situation frequently results from unforeseen changes in circumstances.

- Uncertain responses. Rules 1 and 2 do not classify anyone who responded 'don't know' to questions about surgery plans.

- Cancellation. Thirty-two of the respondents canceled or simply did not appear for their appointments with the program physician and so could not answer questions 12, 40, or 44.

These 109 observations were classified by examination of the interview forms themselves. In each of these cases, observations were classified by the answers to the following open-ended interview questions:

43. In what way did the second opinion you obtained influence your final decision about surgery?

125. What was the main reason you decided to have this surgery?

128. What was the main reason you decided not to have this surgery?

For patients who canceled, the following question is also pertinent.

> 106A. Why did you decide not to see a doctor for a second opinion?

Rule 6. If the respondent answered Questions 43, 125, or 128 in such a way as to indicate that the second opinion dissuaded the respondent from carrying out the plans that he or she had formulated after the initial physician visit, then plans are judged to have changed for or against surgery, as appropriate. Since initial plans are often unclear, even to the respondent, this judgment is frequently difficult to make. Respondents who referred to greater trust in the second opinion physician or objections to the second opinion requirement as a reason for changing plans, for example, were coded as changing their plans because of the program.

If the respondent answered Questions 43, 125, or 128 in such as way as to indicate that other factors accounted for their change of plans (for example, fear of surgery or improvement in the patient's condition), or if respondent makes no mention of the second opinion in answering these questions, then the respondent is judged to have been unaffected by the program. If a respondent who canceled answered question 106A in such a way as to indicate that the difficulty of complying with the second opinion requirement led him or her to cancel and if the respondent had previously indicated that he or she planned on surgery, then the respondent was judged to have changed plans and to have forgone surgery as a result of the program.

Finally, there were 16 cases that could not be classified using any of the decision rules developed. These were assigned to the category "could not be determined." Rule 6 is probably a conservative rule. It is more likely that the second opinion caused people to change their minds, even though they didn't mention it, than that something other than the second opinion caused people to change their minds, even when the response indicates that the second opinion made the difference. Thus, our estimate of the total number of individuals who changed their plans as a result of the second opinion program is most likely a lower bound on the true number.

A.1.6 Massachusetts CPES—Medicaid Surgery Rate Data

The rate at which the procedures covered by the CPES were undergone by the population covered by the program was analyzed to detect any changes caused by implementation of the program. Data were needed to support three comparisons:

- comparison of the rate for program procedures in Massachusetts before and after program implementation;

- comparison of changes in the rate for program procedures to changes in the rate for a group of related comparison procedures; and

- comparison of changes in the rate for program procedures in Massachusetts to changes in the rate for those same procedures in a comparison area not covered by the program.

Multivariate modeling techniques were used to distinguish the specific impact of program implementation on surgery rates from the effects of other factors that might have caused any observed changes.

Selection of the Comparison Site.[14] One estimate of the impact of the CPES on an areawide basis, due both to the direct effect of the program on its participants and to its indirect effects on the rest of the eligible population, was formulated by measuring the change in the rate of covered surgery in the entire eligible population. It is recognized that program-related changes in this rate are caused by a direct program effect (i.e., changes in the rate at which patients follow their physicians' initial recommendation to undergo surgery, which would be likely to be influenced by a consultation obtained through the CPES) and an indirect effect (i.e., program-motivated changes in the rate at which physicians recommend surgery and in the rate at which nonparticipant patients choose to undergo surgery). This analysis does not involve randomized selection of participants, as entire area populations are used. If the nonprogram characteristics of the area covered by the program are felt to change slowly over time, it is possible to use a pre-post type comparison; this, however, does not control for other factors that may be contributing to the experimental effect differentially over time. It is therefore preferable to select a separate area that is as similar as possible to the program area. Similarity was, in this case, assessed by matching on measures characterizing the entire population of the area. While it is impossible to obtain a control area that matches the program area in all aspects, it is possible to control for the unavoidable differences with statistical techniques. It is desirable to minimize the number and magnitude of these differences, however, in order to minimize correspondingly the statistical controls necessary and to maximize the reliability and precision of the final estimate of program impacts.

[14]The methodology for the selection of the comparison site for the analysis of the CPES is described in detail in Appendix D of the evaluation methodology plan (Poggio et al., Evaluation of the Impacts of Second Surgical Opinions for Elective Surgery: Research Objectives and Methodology, Abt Associates Inc., April 11, 1980). It is summarized in this section for the reader's convenience.

The technique used to select the comparison area was a "means-matching" technique using 23 measures to capture the dimensions on which it was felt most important that the areas be equivalent. Each measure was assigned a weight based on the degree to which its equivalence was felt to influence the quality of the overall match. (These weights were assigned by project staff exercising subjective judgment. A series of different weights were tested with basically similar results.) While there were additional criteria that might have been used, data were not available to allow their inclusion. The criteria used and the final weights assigned are listed in Table A.12.

The matching technique itself was executed as follows. The criterion for similarity was that the computed distance between Massachusetts and each eligible comparison state be among the smallest computed values. The distance measure for each state was calculated by (1) multiplying, for each measure, the assigned weight by the state's value of that variable, divided by the standard error (calculated across states); (2) subtracting the state's resulting values for each variable from those for Massachusetts; and (3) summing the absolute values of the quantities obtained in (2) so that a single distance score was obtained for each state. The smaller the score, the better the match.

The results of this algorithm showed that eight states were good matches for Massachusetts, while the remaining states had very high distance scores. Each of the eight most similar states were evaluated with regard to additional considerations, including:

- whether it previously or currently had a second opinion program as part of the Medicaid program and/or whether the implementation of an SSOP was under consideration;
- whether the data needed for the evaluation were available; and
- whether it was willing to participate in the evaluation.

Based on this investigation, Connecticut was tentatively chosen as the comparison site. To confirm this selection, evaluation staff held discussions with Regional Office staff and reviewed the state Medicaid plans for Connecticut and Massachusetts to determine if any major differences existed in the eligibility criteria, the prior authorization requirements, or the benefits offered by the two states. No such differences were discovered or mentioned by program staff. Therefore, Connecticut was chosen as the comparison site for Massachusetts.

Several years later, Connecticut did, in fact, add a mandatory second surgical opinion program to its Medicaid program. As a result, the surgery rate analysis was

Table A.12

VARIABLES CONSIDERED IN SELECTING A COMPARISON GROUP FOR THE MASSACHUSETTS MEDICAID POPULATION

Variable	Assigned weight
Percent of AFDC recipients residing in counties with more than 500,000 AFDC recipients (1974)[a]	0.082
Percent of AFDC recipients residing in counties with fewer than 50,000 AFDC recipients (1974)[a]	0.003
Median years of school completed by female heads of household in poverty (1975)[a]	0.037
Average adult (age 12-64) Medicaid payment (1975)[b]	0.065
Leniency/restrictiveness scale of AFDC eligibility factors (1975)[a]	0.102
Percent of AFDC applications submitted that are approved (April to June 1975)[a]	0.08
Percent of Medicaid budget that is Federal Assistance (1975)[c]	0.026
Percent of population either AFDC of SSI recipient[d]	0.057
Size of Medicaid program relative to state income levels (1975)[b]	0.05
Percent of population black (1970)[d]	0.055
Percent of population urban (1970)[d]	0.05
Per capita hospital beds (1975)[e]	0.112
Physicians per 100 persons (1975)[f]	0.127
Surgeons per 100 persons (1975)[f]	0.035
Percent of MDs who are surgeons (1976)[f]	0.016
Percent general surgeons (1976)[f]	0.007
Percent neurologists (1976)[f]	0.007
Percent obstetricians and gynecologists (1976)[f]	0.007
Percent ophthalmologists (1976)[f]	0.007
Percent orthopedic surgeons (1976)[f]	0.007
Percent plastic surgeons (1976)[f]	0.007
Percent colon and rectal surgeons (1976)[f]	0.007
Percent other surgeons (1976)[f]	0.007

[a]From Campbell and Bendick, 1977.

[b]From U.S. House of Representatives, March 1977.

[c]From Illinois Economic and Fiscal Commission, 1976.

[d]From Bureau of the Census, 1975.

[e]From AHA, Hospital Statistics, 1977.

[f]From American Medical Association, Physician Distribution, 1977.

confined to the period ending September 1982, the month before the Connecticut program was initiated.

As noted below, there are some differences in the way that the two states maintain their data on a few specific recipient groups, such as the institutionalized population and foster care children. Another complication was the fact that Connecticut began processing its claims through a Medicaid Management Information System (MMIS), administered by an outside contractor as of October 1981. These issues were addressed in the design of the evaluation data collection effort, and the residual differences are not felt to introduce bias into the surgery rate calculations.

Selection of Procedures for Analysis. A total of 20 procedure code groups was included in the analysis (see Table A.13). Eight of these consisted of the specific Medicaid procedure codes covered by CPES requirements in Massachusetts and the equivalent codes in Connecticut. The other 12 groups were selected in consultation with physicians at the University of Michigan to constitute a broad range of common elective procedures comparable to the procedures covered by the program. These were to serve as a comparison group to control for any general trends in surgery over the period of observation, thus avoiding any confounding of a program effect with a change in the rate of surgery due to some other cause. The procedures were selected from a pool of procedures compiled from various lists of procedures that had been considered for inclusion for other second surgical opinion programs, procedures found to be most common among the participants of existing programs, and the procedures rated by the project's physician panels (see Appendix B). Some of the procedures selected also served to measure a substitution effect (i.e., a decrease in hysterectomies offset by an increase in D&Cs, or a decrease in tonsillectomies/adenoidectomies offset by an increase in myringotomies).

In defining the individual procedure groups, it was necessary to account for the fact that the coding systems used in the two states differed both in terms of the specific codes used and in terms of structure. A procedure or group of procedures covered by a single code in Massachusetts might take several codes in Connecticut; a procedure covered by a single code in Massachusetts might be subsumed under an "all other" category in Connecticut. In addition, one system was used in Connecticut before MMIS, another to process claims under MMIS. For these reasons, the codes could not be matched on a one-to-one basis and the procedure group system was used. When the groups were defined, care was taken to ensure that the actual procedures covered by the codes in a given group in Connecticut were equivalent to the procedures covered by the corresponding group in Massachusetts; however, when a "not elsewhere classified" code

Table A.13

SURGICAL PROCEDURES INCLUDED IN THE ANALYSIS OF MEDICAID SURGERY RATES

1. Hemorrhoidectomy*
2. Cholecystectomy*
3. Tonsillectomy and/or adenoidectomy*
4. Herniorrhaphy for inguinal hernia
5. Hysterectomy*
6. Cystoscopy
7. Cystoscopy with excision/destruction of local lesion of bladder
8. Ligation/stripping of varicose veins*
9. Bunionectomy
10. Meniscectomy*
11. Disc surgery/spinal fusion*
12. Dilation and curettage of uterus (under age 65), nonobstetrical
13. Cataract removal
14. Prostatectomy, open
15. Prostatectomy, transurethral (TUR)
16. Cardiac bypass surgery
17. Myringotomy without adenoidectomy
18. Appendectomy
19. Submucous resection/rhinoplasty/ repair of nasal septum*
20. Thyroidectomy

* Covered by CPES in Massachusetts.

was called for in Connecticut (because no equivalent for a Massachusetts code or part of one existed), it was not included, since its inclusion might also bring into the analysis many additional activities unrelated to CPES or comparison surgery in Massachusetts.

Also considered in the definition of the procedure code groups was the fact that the coding systems, the list of codes covered by the CPES, and the codes covered by Medicaid changed over the course of the observation period. All editions of the program code manuals in use during the period were consulted in defining the list of codes included in the analysis, so that any codes used during the period for the procedures of interest were included. It was also necessary to ensure that any claims for codes dropped from the CPES during the period were also dropped from the data collection, in order to avoid including non-CPES surgery in the CPES categories.

When codes that were dropped from the CPES were also dropped from the Medicaid program altogether, no special action was needed, since no further claims under those codes would be received. To facilitate analysis of procedures where codes were dropped from the CPES but retained by Medicaid, three of the twenty procedure groups were subdivided into subgroups of codes sharing a common time frame in the CPES, and corresponding subgroups were established in Connecticut. Claims under the codes in these groups were counted as "program surgery" only during the period that the Massachusetts codes were covered by the CPES. The codes for cholecystectomy were treated in a similar fashion.

Definition of the Population Included in the Analysis. In order to calculate the rates of surgery for the program and comparison areas, it was necessary to know the number of persons included in the relevant population, in this case defined as the portion of the Medicaid-enrolled population covered by the CPES in Massachusetts and the corresponding group in Connecticut. In order to calculate the rates from month to month, it was necessary to have these data on a monthly basis.

Obtaining this information was not a straightforward task, because none of the available data on Medicaid enrollment specifically enumerate the group subject to the CPES; rather, they at best present the number of enrollees in each category of assistance. (Table A.14 lists the categories of assistance in each state.) The CPES covers Medicaid recipients in Massachusetts who have inpatient benefits but no other form of insurance coverage or HMO enrollment. Thus, recipients other than these (i.e., recipients with no inpatient benefits, recipients with dual coverage, and HMO enrollees) had to be identified and excluded from the population counts used to calculate the surgery rates.

Table A.14

MASSACHUSETTS CPES

MEDICAID ELIGIBILITY CATEGORIES, MASSACHUSETTS AND CONNECTICUT, AND INCLUSION IN THE ANALYSIS OF SURGERY RATES

Category	Massachusetts code	Connecticut code	Included in analysis
Refugees	00	R	Yes
SSI - aged	01	A	No
AFDC - unemployed fathers basic	02	T C	Yes
SSI - disabled	03	D	No
SSI - blind	(NA)	B	No
General relief (adult)	04	(NA)	No
MA (Title XIX) only - aged	05	NA	No
MA (Title XIX) only - AFDC	06	NC	Yes
MA (Title XIX) only - disabled	07	ND	Yes
MA (Title XIX) only - blind	(NA)	NB	No
MA (Title XIX) only - under 21	08	NF,NG	Yes
MA (Title XIX) only - refugees	(NA)	NR	Yes
Food Stamps	09	(NA)	No
Child Welfare	region=9	W	No
CAMAD (Connecticut Aid and Medical Assistance to the Disabled - state funded)	(NA)	Case No. = 360000-369999	No

Differentiating recipients without inpatient coverage was the easiest task, as all are included in categories 04 and 09 in Massachusetts and are not included in the Medicaid eligibility data system in Connecticut. Identifying recipients with dual coverage is more difficult, since they are spread across various categories of assistance. Though there are "other insurance" flags on the computerized eligibility files in both states, neither was felt by the respective program staffs to be reliable for any but recent cases. For this group, the methodology used by the DPW analysis was adopted, and entire categories where most recipients were felt to have other coverage were excluded. These include the aged and disabled with SSI benefits as well as the aged with Title XIX benefits only. Almost all of these recipients were assumed to have Medicare coverage. While some proportion of the disabled recipients without SSI benefits were also thought to have Medicare coverage, it was estimated to be 40 percent or less, so that the number of surgeries for program eligibles that would be lost by exclusion of the entire category was greater than the number of surgeries for noneligibles that would be gained by their inclusion.

The gross exclusion of these categories probably excludes some persons who, in fact, did not have other coverage and were thus subject to the CPES; it also makes a tacit assumption that Medicare is the only other third-party coverage possessed by any significant portion of the enrolled population. The retention of all other categories includes in the analysis some number of recipients who, in fact, have other coverage and were therefore not eligible for the CPES. There was no practicable way to avoid these problems, but they were not felt to be a source of problematic bias in the surgery rate estimates. It was, in addition, felt to be desirable (and efficient) to maximize the degree of consistency and compatibility with the DPW analysis.

The adjustment to exclude HMO enrollees was made in Massachusetts only, since no plans in Connecticut enrolled Medicaid recipients during the analysis period. As described below, this was accomplished using data on HMO enrollment obtained from DPW.

In Connecticut only, an adjustment was made to exclude recipients, both with and without SSI benefits, whose eligibility was based on blindness. In Massachusetts, all benefits for the blind are administered not by the Department of Public Welfare but by the Massachusetts Commission for the Blind, which functions, in effect, as a "second" single state agency for these recipients. They are, therefore, not part of the DPW Medicaid program and not eligible for the CPES. Also, in Connecticut only, an adjustment was made to exclude recipients under the CAMAD program, a totally state-

funded program for the disabled medically indigent who do not meet Medicaid eligibility criteria.

In both states, foster children and child welfare cases were excluded from the surgery rate analysis, though these groups are eligible for the CPES in Massachusetts. This was due to the fact that reliable estimates of their numbers were not available in either state.

Definition of Geographic Areas. For the purpose of analyzing the rate of surgery over time in order to detect program effects, there were conflicting considerations influencing the choice of the geographic unit of analysis. It was desirable to choose a number of small areas in order to maximize the number of observations and increase the reliability of the estimates, but it was also necessary to choose populations large enough to produce a usable frequency of surgery within each of the 20 procedure groups.

In Massachusetts, the largest geographic unit considered was the health care foundation/PSRO area, since it was intended to analyze the rates at this level in order to detect differences attributable to the differences in the administration of the program by each foundation and/or to the characteristics of their areas. In Connecticut, the intent was to choose areas similar to the foundation/PSRO areas in Massachusetts. While Connecticut is divided into four PSRO areas, it happened that the enrollment data needed for the surgery rate calculations were not available on that basis; rather, they were kept according to the areas assigned to each of the regional welfare service offices through which the Department of Income Maintenance administers the Medicaid program. The use of a weighting algorithm to allocate the enrollment data across the PSRO areas was considered, but the differences were so great that no plausible algorithm could be developed. The welfare service district offices are comparable in size to the PSRO areas, so that this difference did not create any problems for the analysis. It is true that, if the Connecticut PSROs themselves had greatly differing impacts on the rates of surgery in their areas, these differences were obscured in the analysis of the rates by the welfare service district areas that cut across the PSRO areas.

For illustration, Table A.15 displays the estimated number of eligibles in the 11 areas used for the analysis in a sample month and their distribution across the categories of eligibility. Exhibits E.7 and E.8 in Appendix E map the geographic areas in each state.

Acquisition of Population Data. The purpose of compiling monthly estimates of Medicaid program enrollment in selected categories of assistance was to provide a denominator for the surgery rate calculations. These data were collected on the subgroup of Medicaid enrollees that were defined above as approximating the population

Table A.15

MASSACHUSETTS CPES

MEDICAID ELIGIBLES INCLUDED IN SURGERY RATE ANALYSIS FILE,
SEPTEMBER 1980, BY AREA AND PERCENTAGE DISTRIBUTION BY CATEGORY OF ASSISTANCE

Area	Total	Percent of state total	Percent refugees	Percent AFDC-UF	Percent AFDC-Basic	Percent MA-AFDC	Percent MA-Disabled	Percent MA-Under 21
MA-PSRO 1	64,880	16.6	0.3	7.9	81.7	4.6	1.1	4.4
MA-PSRO 2	41,516	10.6	1.3	4.9	82.0	5.2	2.6	4.0
MA-PSRO 3	11,730	3.0	2.2	4.2	76.4	9.5	4.0	3.8
MA-PSRO 4	208,322	53.1	1.3	4.6	82.9	5.9	2.1	3.2
MA-PSRO 5	65,526	16.7	0.6	5.9	82.6	6.4	1.1	3.4
CT-WSD 1	41,978	26.3	0.9	2.5	84.1	2.8	6.3	3.3
CT-WSD 2	30,466	19.1	0.2	2.4	87.2	2.3	6.1	1.9
CT-WSD 3	39,942	25.1	1.2	2.0	88.7	1.5	4.9	1.7
CT-WSD 4	14,601	9.2	0.2	3.2	81.2	3.9	7.6	4.0
CT-WSD 6	17,025	10.7	0.6	3.5	81.6	2.1	9.2	3.1
CT-WSD 7	15,340	9.6	0.9	2.1	80.6	3.5	10.2	2.7

Sources: Massachusetts Department of Public Welfare Monthly Summary Expenditure Report (MSER); Connecticut Department of Income Maintenance W-104 caseload reports.

covered by the CPES, by month and by the geographic areas chosen as the unit of analysis.

Much has been written about the problems of obtaining accurate data on Medicaid program enrollment. Some of the problems most often mentioned include the following:

- Individual recipients are constantly moving onto and off of the rolls, and complex measures (e.g., "recipient-days") are needed to define a count of program enrollment over an extended period of time.

- Ascertaining the number of recipients eligible at a given point in time is complicated by the fact that up to three months of retroactive eligiblity is extended to new recipients in certain categories of assistance.

- A sizable proportion of persons receiving services are not actually eligible for the services they receive, and it is not clear how/if they can be identified and whether or not they should be considered in the population at risk.

- There are widespread problems in the accurate counting of pregnant women and newborn children.

- Some number of recipients have more than one open record at one time, due to the creation of new records for recipients who are actually re-enrolling, or to other problems.

While all of these problems are possible shortcomings of the data used for the analysis, there were not, in fact, any available alternative sources from which to obtain the needed data, and resources were not available for general audit/repair work on two states' Medicaid enrollment files. The available files were evaluated as to their capability of being used for the specific purpose at hand without introducing serious bias into the surgery rate calculations; less emphasis was placed on their ability to produce precision in the final rates. It was determined that some of the flaws were mitigated by the intended application of the data (e.g., the fact that monthly estimates were to be developed tended to compensate for enrollment fluctuations other than daily or weekly changes). The remaining flaws were felt to be sources of random error that would not pose a danger to the analysis by differentially affecting the rates based on the data.

Massachusetts. Two computerized sources of data on enrollment in the Massachusetts Medicaid program were maintained by the Department of Public Welfare at the time of data collection. One was a monthly backup of the live recipient master file--a monthly "snapshot" of the enrollment file as it existed during each month.

The second source was the Recipient Extract Master File (used above as a source of data for the surgical decision follow-up analysis). This file had a complete

eligibility history (back to the early 1970s) for each recipient. It also included records for all recipients for whom claims were paid by DPW. It thus included data on recipients whose eligibility was not otherwise monitored by DPW (such as, until the middle of the data collection period, recipients whose eligibility was assigned by the Department of Mental Health). It was composed of two separate files, one for recipients and one for dependents. It was, however, limited (for the purpose at hand) by the fact that its geographic location data (address, town, zip code) on each recipient were limited to the most recently updated information.

Neither of these data sources was suitable for the needs of the analysis. The use of the first file called for the processing of 136 separate runs (68 months x 2 files) at DPW, an approach considered infeasible by all involved. The latter file lacked reliable historical data on the geographic distribution of the population that it did include.

Based on an evaluation of the available alternatives, it was decided to use the same source of data as the DPW analysis project, the Monthly Summary Expenditure Reports (MSER). These are monthly printout listings of active cases and recipients for each category of assistance in each of the approximately 115 welfare service office (WSO) areas across the state. (Exhibit E.9 in Appendix E is an example of the state total table for a single month.) While these reports exclude data on recipients whose eligibility is not processed by DPW, they do provide reliable information on the geographic distribution of the enrolled population over time, and they do provide data on each category of assistance.

Given that the data provided by the MSERs is at the WSO level, it was necessary to aggregate the data up to the foundation/PSRO area level. This is a relatively straightforward operation except for two types of WSOs: those that straddle the border between two foundation/PSRO areas (11 in total) and those that are assigned for administrative purposes and do not correspond to a specific location (14 in total).

For the WSOs split across areas, an analysis of the distribution of the enrolled population by zip code at several points in time was conducted by DPW. It was found that in all but five of these WSOs, more than 90 percent of the population of each split WSO was actually located in one of the two areas. For analysis purposes, the population of the WSO was assigned 100 percent to that foundation/PSRO area. For the five remaining WSOs, the population was allocated to each area on a percentage basis. These allocations were checked at several points in time to determine if changes in the allocation algorithm were needed. In one of the WSOs this was found to be appropriate, and a time-dependent algorithm was applied to the population of that WSO. When

further checks on the DPW algorithms were conducted for the current analysis, time-dependent algorithms were developed for more WSOs.

The eligibility estimates developed by DPW for the overlapping period of analysis were used for the current analysis. This was motivated chiefly by the inaccessibility of the MSER reports for the years 1975 through 1977, which had been placed in storage, and by the fact that the data source and data collection methodology were equivalent. Thus, primary data collection was performed only for the incremental time period (i.e., the years 1979 through 1982).

Manual abstraction of the data from the MSERs for these four years was accomplished by evaluation staff working at the Finance Office of DPW. In addition to the data for 1979 to 1982, several months of 1978 data were also abstracted to allow verification of the fact that the adjustments made to the data were equivalent to those made by DPW and that the final population estimates for the two time periods were thus comparable. Data were collected for all WSOs and for all categories of assistance.

Information was obtained from program staff on changes in WSO configuration that had taken place during the intervening time period, so that necessary modifications could be made to the WSO-to-foundation/PSRO area allocation algorithm.[15]

Following keypunch and verification, the data on the eligibles in each WSO in the categories of assistance included in the analysis were reassigned to a foundation/PSRO area and then aggregated by month to obtain monthly recipient totals for each area.

From these totals, it was necessary to exclude HMO enrollees. Monthly data on the number of HMO enrollees by category of assistance and plan were obtained for most of the months in the incremental time period from the case management office of DPW.[16] Values for the months where data were unavailable were imputed by interpolation from available data. In order to maintain comparability to the data for the earlier

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[15]The major change that took place during the period was the implementation of Region 6, containing WSOs in the 500 series which serve as "catchall" WSOs for the assignment of long-term care and other specialized Medicaid cases from each Medicaid region. They absorbed cases formerly assigned to other WSOs and were therefore assigned to PSROs based on the allocation of the contributing WSOs.

[16]The number of Medicaid HMO enrollees was small relative to the program population, and relatively stable, ranging between 0.5 and 1.0 percent of the estimated CPES population during the incremental data collection period.

period, the DPW allocation of each plan's members to a single foundation/PSRO area was used.[17]

The resultant "new" estimates for the months in 1978 were compared to the DPW estimates and found to be very close, enough so to assume that the newer data were basically comparable to the DPW estimates.

It should be noted that the MSERs, and the resultant enrollment estimates, did not contain data on recipients whose enrollment is processed by the Department of Youth Services or on foster care children, since these recipients are not assigned to specific geographic areas. However, since claims for these persons were also excluded from the surgery counts, this exclusion does not skew the final surgery rates upward.

Connecticut. There were few options for consistent sources of enrollment counts on the portion of the Medicaid population in Connecticut comparable to the CPES population in Massachusetts. Before MMIS, there was only one computerized file of enrollees (the Medical ID master file) that is designed to maintain history on all current and past enrollees; in the past, however, certain types of inactive cases were purged from the file after a specified time period had elapsed. Therefore, the file could not be used to construct an accurate and complete profile of program enrollment over time. According to program staff, backup files were maintained for three months only, so that the historical "snapshot" archive files of the type available in Massachusetts were not available in Connecticut.

In order to comply with federal reporting requirements, various data systems had been developed that can now produce detailed data on enrollees by category of assistance; these, however, did not provide data for periods earlier than 1978. Use of these data (and shortening the analysis period) was unacceptable, since it would have eliminated any comparison data for the period before implementation of the CPES in Massachusetts.

The only source of monthly enrollment data covering the entire period of the analysis that could be found were the hard copy W-104 monthly caseload reports completed by each of the six welfare service offices. These list the total active caseload at each office at the end of each month by category of assistance, and they were available at a sufficient level of detail back to July 1975. The precision of the data is suspect,

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[17]Members of the Harvard Community Health Plan were assigned to the Bay State Health Care Foundation area; members of the Valley Health Plan and the North Quabbin Health Plan were assigned to the area covered by the Health Care Foundation of Western Massachusetts, and members of the Fallon Community Health Plan, which was not enrolling members during the period covered by the DPW analysis, were assigned to the area covered by the Central Massachusetts Health Care Foundation.

since much of it was computed manually,[18] but the errors are assumed to be random across offices, months, and categories of assistance.

It was necessary to convert the case-level data to numbers of recipients, in order to be consistent with the data in Massachusetts. Connecticut program staff provided several data sets to be used in developing the translation algorithms, including yearly data by town on the number of cases and recipients in the AFDC categories and quarterly statewide data on the number of recipients and cases in the Title XIX-AFDC and under-21 categories. Interpolation was used to develop values for each month. No data were available on composition of the refugee cases (which represent less than 0.5 percent of the total), so the average case size for the corresponding cases in Massachusetts was applied as a flat rate across areas and months. Based on program staff information, the Title XIX-Disabled cases were assumed to be one-person cases.

No adjustment for HMO enrollees was necessary, since none of the plans in Connecticut enrolled Medicaid recipients during the analysis period. No specific exclusion of Child Welfare cases was necessary, as they were not included on the W-104 reports. To the extent that the institutionalized population is enrolled in Medicaid, their cases were included in the population estimates (unlike Massachusetts); however, they were carried on the rolls only when they were admitted to a hospital for acute care and only for the duration of the stay; they were not enrolled in the program while they were in the institutions. The number of such persons in the hospital (and therefore on Medicaid) at any one time is assumed to have been quite small. Finally, no geographic adjustment was needed, since the area for which the data were received was used as the unit of analysis.

Acquisition of Surgery Data. The sources of data on the number of surgeries in the specified procedure groups that were performed during the analysis period were the claims history files maintained by the Medicaid programs in Massachusetts and Connecticut. Questions are frequently raised concerning the completeness and the accuracy of data from these sources; however, there was no practical source of superior data for this purpose. It is conceivable that a survey of a sample of recipients could have been conducted to determine the incidence of surgery, but, given the retrospective nature of the data collection (8 years of history) and the rarity of the event of interest

[18]The caseload figures were computed by adding the number of new cases and subtracting transfers and terminations from the previous month's numbers. Occasionally, the data represented a "validated count" where program staff had audited the files to determine the actual number of active cases in a particular category. Over time, the counts for some categories began to be generated by computerized tracking systems.

(one of the procedures in the 20 selected groups), it is almost certain that recall and sampling biases engendered by such an approach would represent a far more serious peril to the reliability of the resultant estimates than those occasioned by the weaknesses in the claims data.

Most of the potential weaknesses of the claims data are discussed in Section A.1.3, and, as is concluded there, most of these problems are random error that may reduce the precision of the surgery rate estimate but are not likely to introduce bias. Insofar as the surgery rate analysis considers the surgical experience of area populations, it is even less affected by these problems, since they are more likely to balance out (e.g., a claim where an erroneous procedure code will cause a surgery to go unobserved will offset a case where an erroneous code will register as a "false surgery"). However, given that the claims were included in the analysis on the basis of broad criteria (rather than the knowledge that a specific person participated in the CPES), two other potential problems arise:

- inaccuracy in the coding of category of assistance on a claim for one of the relevant surgeries such that it is wrongly included in or excluded from the analysis; and
- problems in the state programs' eligibility screening process such that claims for eligible recipients are disallowed while claims for ineligible recipients are accepted.

Both of these were also assumed to be random errors.

The possibility of intentional miscoding of claims by providers presented somewhat different problems for the surgery rate analysis than it did for the surgery decision analysis. Intentional miscoding to maximize reimbursement was not considered a major issue, since program staff felt this to be uncommon and since there was no evidence of billing patterns changing over time (so that the estimates of changes in the rate of surgery over time would not be affected). Use of the emergency prefix to avoid CPES requirements would also have no effect, since, once again, because of reported inconsistent usage of the prefix, all claims carrying the relevant four-digit procedure codes were included in the calculation of the surgery counts, regardless of prefix (and this is again a qualification to the data).

However, if, following program implementation, there were an observed areawide decrease in the rate of the program procedures and an increase in the rate of other related procedures, it would still be impossible to determine whether the phenomenon were due to a change in surgeons' coding practices or whether surgeons were actually performing non-CPES procedures at a higher rate. If the latter, the policy

question becomes whether they were performing the non-CPES surgery on what would have been a CPES surgery patient or whether an actual decrease in the number of CPES procedure patients had left more room in their schedule for non-CPES procedure patients. Resolving this particular question was certainly beyond the scope of the present project.

The problem of missing claims was again the one that bore the most consideration. In both states, residents and salaried physicians did not submit bills. However, program and hospital staff in both states noted that a supervising or attending physician would almost always bill for the surgery. The DPW analysis of 2,501 CPES participants determined that 3 percent of the total participants for the period had a CPES surgery within six months of referral without its being included in the claims files. Though program participants cannot be considered to be equivalent to the total eligible population, it is relatively unlikely that the incidence of the phenomenon in the larger group would be significantly greater. Of course, it is possible that the burdens of program participation might increase the rate at which physicians decline to perform surgery on Medicaid patients, referring them instead to a hospital clinic where a salaried physician would be more likely to take over their care. There is also, however, the consideration that there are not very many hospitals where residents or staff physicians perform surgery, so that their surgery, even if not billed, would not have very much of an impact on the reported overall rate of surgery when considered across foundation areas.

The most conclusive type of data collection would be a combination of claims history review followed up with hospital record verification of a sample of cases. Such an endeavor was beyond the scope and resource constraints of the current effort.

Massachusetts. Data on the number of surgeries performed were obtained from the VPS-II master claims history files. The earliest claims retrieved were those for May 1975, the earliest date for which the procedure codes on the file are considered reliable. While the file contains claims from all providers (physicians, hositals, nursing homes, etc.), only the physician claims were used for this analysis, since they were the only records that carried the procedure code.

The file for 1975-76 (consolidated) and the annual files of claims processed for the years through 1982 were accessed separately. Initially, all physician claims for persons in the categories of assistance included in the analysis and carrying a procedure code for any type of surgery were selected. From the resulting files were selected all claims with the procedure codes specified for the analysis. In addition to the procedure code, each bill carries a type of service code that is generally linked to the provider type (there are separate codes for the surgeon, the assisting surgeon, the anesthetist, etc.) A

wide range of these codes was included in the selection criteria in order to ensure that all possible bills for a surgery were included; thus, if a resident performed the surgery and no bill was submitted, an anesthetist bill may have "represented" that surgery in the analysis. These selection steps resulted in a file containing 229,045 claims in the consolidated file of data across all years.

These claims were screened to ensure that all surgeries in the eligible population were counted, and counted only once. The computerized cleaning screens eliminated the following records:

- all claims for persons not eligible at the time the service was rendered (based on payment disallowance codes) (28,838 records);
- claims before May 1975 or after September 1982 (5,577 records);
- duplicate bills (for same recipient, same procedure, same date of service) (60,281 records);

A final screen ensured that only one record would be retained for each surgical episode and that this would be accomplished consistently across the two states, even though a surgery would be billed using one code in one state and using two or more codes in the other. The general approach, developed in consultation with physicians at the University of Michigan, was the definition of the length of a surgical episode as a maximum of seven days. If, for a single recipient, more than one bill for procedures within one of the 20 procedure groups were found occurring within a seven-day period, only the first one was retained in the file. If two bills for these procedures were found with dates of service nine days apart, each was considered a separate episode and both were retained. This screen eliminated a total of 15,549 records.

The DPW analysis developed a series of screens to eliminate multiple occurrences of "one-time procedures," procedures considered to occur only once in a person's lifetime (e.g, tonsillectomy, hysterectomy, and cholecystectomy). Such screens were omitted from the preparation of the files for the current analysis because they introduce a bias by eliminating second occurrences only when both occur within the period under observation; it cannot be known how many of the recipients with apparently unique occurrences of these procedures during the analysis period actually could also have been eliminated on the basis of other (later or earlier) claims that were not considered.

After the screening process was completed, the claims were aggregated by area, procedure group, and month of service. Because it was felt that program impacts might vary by category of assistance, claims were aggregated separately for the three

groupings that could be built consistently across the two states--AFDC, Title XIX only cases, and refugees.

Connecticut. As in Massachusetts, claims history files were the source of the data on the number of surgeries performed during the period of interest. Some problems were encountered in accessing the data (since, unlike in Massachusetts, no previous project had laid groundwork for the data retrieval and since data had to be obtained from two separate systems, the MMIS and the pre-MMIS internal state system). For the pre-MMIS period, the most basic history files were separate files of all claims processed during each month. To avoid the necessity of running against 77 separate files, these files were not used; rather, the pre-MMIS data were obtained from annual cumulations of monthly abstract files prepared by the Office of Provider Relations. The drawback of this approach was the loss of the earliest 14 months of data, since the files used were first created for fiscal year 1977; thus, the first data available were claims processed in July 1976, and no surgeries before that date were included in the analysis.

Claims for services beginning in October 1981 were included in the files maintained by the MMIS. While the data were maintained in a format different from that of the internal state system used previously, state and project staff coordinated to produce a data extract that was equivalent to the data for the earlier period. Where more information or greater detail were available from the MMIS, the data were collapsed into the broader categories equivalent to the earlier data.

A significant factor distinguishing the Connecticut files from those in Massachusetts is the fact that only paid claims are included. The major effect of this difference is that records such as duplicate invoices, resubmissions, and claims for ineligible persons that had to be screened out of the Massachusetts file were not present in the data received from Connecticut, so that those screens were not necessary.

The general approach used to extract the surgery data was the same as that used in Massachusetts. All physician bills (defined by provider type code) for surgery (defined as a broad range of procedure codes) were extracted from the history files. From the total surgery claims received, claims bearing the procedure codes of interest for persons in the categories of assistance of interest were selected. Separate lists of codes were used for the pre-MMIS data (coded in Connecticut's modification of the California Relative Value Scale (RVS) and the MMIS data, which were coded using a system based on the fifth update of the Current Procedural Terminology, fourth edition (CPT4) with some state modifications.

The selection of claims records by category of assistance presented a special problem in Connecticut, since the claims history files for the pre-MMIS period did not

distinguish the categorical relationship of persons with Title XIX-only entitlement. These categories of assistance are labeled with an 'N' prefixed to the categorical relationship; for example, while aged recipients with SSI benefits are enrolled under category 'A', aged recipients who meet all but the income criteria for SSI receive Medicaid only and are enrolled under category 'NA.' On the claims files, only the 'N' prefix was retained, so it was not possible to distinguish a Title XIX-only aged recipient from one who was Title XIX-only AFDC.

In fact, the only 'N' categories intended to be excluded from the analysis were NA (aged) and NB (blind). As it turned out, the problem was largely mitigated by other characteristics of the claims processing system. The NB claims were not given serious consideration because the category was so small (less than 0.5 percent of all cases, and a smaller proportion of all recipients). Virtually all the NA recipients are covered by Medicare, which would almost always be a first source of payment for surgery. When Medicaid pays the coinsurance or deductible on a Medicare claim, no procedure code appears on the bill; rather, a flag appears in the procedure field to indicate whether it is the deductible or the coinsurance that is being paid. Since these flags would not meet the criteria for selection as one of the procedure codes of interest for the analysis, these claims would not be selected for inclusion in the analysis.[19]

This failure to pick up claims with Medicare involvement applies to claims in all categories of assistance. A general qualification of these data is some question as to the reliability of the coding of category of assistance on the claims in general. It would have been desirable to match each claim against the master enrollment file to check that the category of assistance code was correct (this would also afford an opportunity to obtain the categorical relationship codes for the Title XIX-only cases), but the unavailability of older versions of the enrollment files ruled out such a validation of the historical data used for the analysis.

The claims were sorted by recipient and by procedure group and screened for duplicate claims and multiple claims per episode. No screening of disallowance codes for ineligible recipients was performed, since such bills were not included on the files. No screen for claims of $20 was included, since a larger number of procedures included had maximum allowable reimbursement amounts lower than $20. This is another way in which the Connecticut data differ from the Massachusetts data. No particular bias and

[19]This is also true in Massachusetts; when claims are processed through the Medicare/Medicaid "piggyback" system, no valid procedure code appears on the history file and the claims would not be included in the analysis.

no great effect is anticipated to result, since the number of claims screened out of the Massachusetts data by this screen was small.

As in Massachusetts, the last step in this stage of processing was the aggregation of the claims by area, procedure group, and month of service, within the three categories of assistance groupings described above.

Acquisition of Covariate Data. In order to analyze changes in the surgery rate over the analysis period for possible impacts of program implementation, it was necessary to include in the analysis data on other factors that might also have affected the rates and account for any changes noted, such as changes in the demographic characteristics of the population and in the medical care supply characteristics of the areas. These data were generally available for the total population only (rather than the CPES population or the total Medicaid population) and at the county level. As noted above, the dissimilarity between the counties in the two states and the analysis areas made translation from one to the other impossible. Therefore, only those data available at the small area level, which could be aggregated up to the analysis area level, were used.

On the supply side, hospital statistics on the number of beds and total patient days in short-term community hospitals were obtained at the individual hospital level. Data for the years 1975 to 1978 were obtained from the files of the National Hospital Rate-Setting Study (NHRS). Data for the years 1979 to 1982 were abstracted from the American Hospital Association Guide to the Health Care Field for each year. From a PSRO data tape supplied to the NHRS by HCFA, data were obtained on the start date of binding review in each hospital. The bed and patient-day data were aggregated to calculate monthly bed capacity and occupancy rates for each analysis area. The binding review dates and the bed data were merged and aggregated to calculate the number of beds in each area under binding review for each month. While the PSRO data were not available for the later period, the proportion of beds under binding review had reached 100 percent by the end of the period for which data were available, and it was assumed to remain so to the end of the analysis period.

In order to approximate the age and sex composition of the CPES population, the DPW analysis developed algorithms to break down the total population in each category of assistance.[20] Since all of the algorithms described linear relationships, the

[20]For example, in each AFDC-Basic case there was assumed to be one female aged 21 to 44; the remaining persons on the case were assumed to be under age 21 and evenly distributed by sex.

proportions of the estimated CPES population in each category of assistance were included directly in the current models as a proxy for age and sex.

In all cases where data were not available for a particular period, values were imputed by interpolating from the available data. When data were unavailable for a particular area, the case was assigned the mean of the available values.

Surgery Rate/Analysis File Construction. Once the three components of the analysis file were prepared, the file was assembled. The first step was the assignment of surgeries to geographic areas.

In Massachusetts, each claim record carries the WSO code. On the basis of these codes, the claims were assigned to foundation/PSRO areas using the same algorithms used earlier to assign the enrollees. For the WSOs split between two areas, the surgeries were allocated to each of the areas in the same proportion as the population had earlier been assigned. Surgeries for recipients assigned to WSOs not included in the population data (foster care children, specialized Medicaid, etc.) were not assigned to any of the areas and were thus excluded from the analysis.

In Connecticut, each claim record carries a town code. Each of the 169 towns can be assigned, with no overlap, to one of the welfare service districts (WSDs), and these codes were used to assign the surgery claims to the analysis areas. The one exception was town 001, Andover, which had a total of 36 Medicaid program eligibles in 1979. The town code 001 is also assigned to claims with a missing or 'bad' town code. In order to avoid the erroneous inclusion of a large number of claims in the counts for its WSD, all claims with town code 001, including the valid claims for Andover, were excluded from the analysis. As noted above, the counts of eligibles in Connecticut also include a small number of institutionalized persons whose counterparts in Massachusetts were excluded from the counts there. These persons' surgeries were included in the Connecticut surgery counts.

Once the assignment of the total monthly surgeries to the analysis areas was completed, the "area-month" record was completed by merging on the CPES population counts and the covariate data developed earlier. The resultant file contained a full data set for the Massachusetts foundation/PSRO areas for all months from May 1975 to September 1982, and for the Connecticut welfare service districts from July 1976 through September 1982.

A.2 Data for the Analysis of the Medicare Second Surgical Opinion Demonstration Programs

The analysis of the utilization of the Medicare demonstration programs in New York and Detroit and the modeling of confirmation/nonconfirmation relied chiefly on the data on each participant collected by each of the programs. However, additional data on participants and on the Medicare population in general were also used. The acquisition and processing of these data are described in Section A.2.1. The analysis of program participants' surgical decisions is based on program record data plus data on medical care received, obtained from Medicare claims records. The acquisition and processing of these additional data are described in Section A.2.2. The analysis of program participation and the programs' impacts on participants' surgery decisions and their health outcomes is based on data collected through personal interviews of a sample of participants and comparison patients. The selection of these samples and the conduct of the survey are described in Section A.2.3. Section A.2.4 presents the algorithms used to infer the programs' effects on their participants from their survey responses.

It should be noted that, while similar approaches to data collection were pursued when comparable data were to be collected in both of the Medicare demonstration sites, significant differences in implementation resulted from differences in program size and procedures and from differences in the administration of the Medicare program in the two program areas. These differences are highlighted at the appropriate points in the discussion.

A.2.1 Medicare Demonstrations—Program Record Data

New York. The demonstration was run by Blue Cross and Blue Shield of Greater New York (BCBSGNY). A file was established at intake for each caller to the program referral center. It included basic demographic data (age, sex, marital status, occupation, etc.), diagnosis, proposed surgery, the name of the proposing surgeon, the date of the last appointment, and other data needed to select an appropriate consultant. (Exhibit E.10 in Appendix E presents an example of the form completed on each participant.) If the beneficiary gave consent, the referral center sent a form to the first opinion surgeon to obtain his or her statement of the diagnosis and surgical recommendations, which was also included in the file. Finally, the findings of the consulting physician(s) were added to the file. Supply of these data to the evaluation was part of HCFA's demonstration contract with BCBSGNY.

When the evaluation was actually begun, one year after the demonstration, a subset of the data items collected on the forms were negotiated to be supplied for

analysis after coding and data entry. The other items were too difficult to code reliably or too rare to be useful. Since only about 17 percent of all participants consented to the demonstration's contacting their first opinion surgeon and only half of the surgeons contacted completed and return the form, very few completed First Opinion Surgeon Reports were obtained, so these data were among the items not supplied.

Coding and cleaning conventions were developed by the Health Affairs Research (HAR) Department of BCBSGNY, whose staff then performed the coding. Diagnosis and procedure data were assigned clinical codes by trained coders. The eighth revision of the International Classification of Diseases (ICDA-8) was used for the first two years' cases; the last year's cases were coded using the ninth revision (ICD-9-CM), in the interest of capturing a greater level of detail and facilitating later matching of the intake data with inpatient claims data, the majority of which were by then also coded using ICD-9-CM. Following coding and editing, the data were entered, verified, and cleaned using range checks, allowable value tests, and logic tests.

Data on third opinion consultations were processed separately because they were very rare, relative to the second opinion cases. In the interest of maintaining an efficient file format, a separate file was established for the third opinions containing full consultation information plus enough identifying information to allow them to be linked back to the appropriate intake and second opinion records.

The resulting data tapes were supplied to the evaluation by BCBSGNY approximately semiannually. Duplicates of the original hard copy files were also provided to allow access to the data items that had not been included on the computerized files. A total of 4,407 cases, including all participants whose records were complete as of December 31, 1980, were included in the utilization and nonconfirmation analysis. Of these cases, 150 had related third opinion consultation records. A total of 5,232 cases were supplied by the demonstration on tape; the data on cases referred in 1981 were used in selecting the survey sample, as described in Section A.2.3.

Some final cleaning of the data was performed upon receipt of the tapes. Any questions or problems discovered were resolved with reference to the hard copy forms or were taken up with HAR staff. Also at that time, a few variables were added to each record. These included a location code (New York City [the five boroughs,] Long Island [Nassau and Suffolk counties,] or Upstate [the remaining 10 counties]), and a code for cases where the proposed procedure was one of the 34 rated by the physician panels (see Appendix B).

Michigan. The Michigan demonstration program was run by Blue Cross and Blue Shield of Michigan (BCBSM). A file was maintained by the program for each participant, similar to those maintained by the New York program. (Exhibit E.11 in Appendix E is an example of the forms completed in Detroit.)

As in New York, a subset of data items collected on each patient was coded, entered, and supplied to the evaluation on magnetic tape. The data supplied by the Detroit program differed from the New York data in two major ways.

In New York, since First Opinion Surgeon Reports were obtained for few participants, these data were not coded and supplied to the evaluation on magnetic tape. In Detroit, if confidentiality was requested by the beneficiary and the physician could not be contacted, the First Opinion Physician Report was completed by referral center staff based on information supplied by the beneficiary. Therefore, all cases had such a report and the information on it was included in the data set that was supplied to the evaluation. A flag variable on each case identified the source of the information on the First Opinion Physician Report.

The second difference involved the clinical coding systems used to describe diagnosis and surgical procedures. In Detroit, the diagnosis data were coded using ICDA-8 only; the procedure data were coded using BCBSM's Medicare Part B procedure coding system, which is an older version of the National Association of Blue Shield Plans (NABSP) coding system.

While supply of these data to the evaluation was made part of BCBSM's demonstration contract, cleaning and editing of the data were not. Therefore, the data received from Detroit required more extensive editing and cleaning procedures than did the data from New York.

As in New York, third opinions were processed as separate records. A total of 262 second opinion records and 10 third opinion records supplied on magnetic tape (and duplicates of the program) forms were included in the utilization and nonconfirmation analyses. While no specific location variable was created for the Detroit cases (due to the small service area), a flag for cases where the proposed procedure was one of those rated by the physician panels was appended to each record

Supplemental Physician Data. While the demonstrations provided basic data on the proposing physician for each case, they did not provide data on the consultants. Since this information was needed for the confirmation/nonconfirmation model, it was obtained from existing sources by the evaluation.

New York. On the program record data file, each physician was identified using the BCBSGNY provider number. BCBSGNY supplied the evaluation with listings of

all of its physician providers, from which a name and address was obtained for each physician listed on the program record file.

Using the name and address, the physician was looked up in the American Medical Association Physician Reference Listing (1976). As was the case for Massachusetts, the 1976 edition was used because later editions did not provide information on year of birth and graduation.[21] If a physician was not found in the AMA listing, he or she was then looked up in the Medical Directory of New York State (1980), which provided slightly fewer data items. When the physician was located, all available data were abstracted and entered. A list of the data items obtained is presented in Table A.16.

Of the 4,407 cases included in the analysis of confirmation/nonconfirmation, data were obtained on the consultants in 3,615 cases (82 percent).

Michigan. The AMA Physician Reference Listing (1976) was also the source of data on consultants in the Michigan demonstration. Consultants' names and addresses were obtained directly from the hard copy program forms and available with which to locate the physicians in the Reference Listing. No state medical directory was used to supplement the AMA data. The use of the older AMA data in order to obtain more complete information, as in the other sites, means that data on physicians relatively new to the area were not available.

Supplemental Surgery and Medicare Enrollment Data. In order to analyze the utilization of the programs, it was necessary to obtain data on the rate of surgery in the Medicare populations they serve. Data on the frequency of selected surgical procedures in these populations were obtained from HCFA's Medicare Provider Analysis and Review (MEDPAR) reports, a series based on a statistical file containing information on the Part A utilization of a 20 percent random sample of Medicare beneficiaries. For this file, procedure and diagnosis data are specially coded by HCFA in Baltimore, and series of tables summarizing the data at the small-area level are produced annually. The data

[21] One of the limitations of the AMA data is that, by relying on the older edition of the listing, data on physicians new to the area, especially residents, are not available. This problem was less serious in New York than in Massachusetts because residents did not constitute as large a proportion of the physicians on whom these data were to be obtained.

Table A.16

MEDICARE DEMONSTRATION PROGRAMS

SUPPLEMENTARY DATA OBTAINED ON PHYSICIANS

Provider code
Zip code
Primary specialty
Secondary specialty
Type of practice
Specialty board certification (primary)
Specialty board certification (secondary)
Birth year
Medical school
Graduation year

used for this analysis came from Table 4, which reports the number of discharges with selected surgical procedures from hospitals in the relevant area.

The most recent reports available at the time of the analysis were for 1977. In order to obtain data on the 17-county New York program service area, data were aggregated for New York PSROs 8 through 17, which include 16 of the 17 covered counties. PSRO 7, including Delaware County, was excluded because it also includes the Albany area. It was felt that the accuracy of the estimates would be more greatly impaired by the inclusion of Albany County than it was by the exclusion of Delaware County.

In Michigan, the three-county program service area coincided with Michigan PSROs 8 and 9.

The MEDPAR report data summarize discharges from hospitals in the program area only, rather than all discharges of area residents. This introduced two possible sources of error: inclusion of surgery on area residents performed in hospitals outside the program area, and inclusion of surgery in program area hospitals performed on out-of-area residents.

Two types of additional data were obtained from HCFA to estimate the magnitude of these problems: data on the PSRO of origin for discharges in the program area hospitals, and data on the PSRO of discharge for all inpatient stays of program area residents. These data were also based on the same 20 percent sample of all short-stay hospital discharges, and included both surgical and nonsurgical stays.

According to these reports, 94 percent of all short-term inpatient stays by program area residents took place in hospitals in the program areas. Of total short-term inpatient stays in program area hospitals, 95 percent were made by program area residents. Thus, it can be seen that the maximum extent of the error is not large.

For the denominator of the surgery rate, it was necessary to obtain data on the number of program area Medicare enrollees with Part B benefits. Such county-level

A.2.2 Medicare Demonstration—Surgery Decision Data

Data were collected on a sample of participants in the Medicare demonstration programs in order to determine whether or not each one had undergone the surgery for which he or she had sought a second opinion. As discussed above with regard to Massachusetts, there were two basic approaches that could have been used to obtain the information. The first was to ask the beneficiary directly; the second was to obtain secondary data on each beneficiary's medical care utilization (chiefly claims for payment made by medical providers) in order to deduce the occurrence of the surgery. As discussed earlier, while use of secondary data might reduce the precision of the final estimate of the proportion of patients who underwent the proposed surgery, it was preferable to deal with this type of error than to deal with the biases that might result from the use of data obtained directly from participants.

The sample of cases on which data were obtained to determine whether or not surgery had taken place consisted of 3,255 records processed during the first two years of the New York demonstration and 262 cases from the first two and one-half years in Michigan.

Medicare claims were the source of secondary data on medical services received by program participants. It was assumed that Medicare would be involved in virtually all episodes involving elective surgery undergone by program participants. While HCFA's central claims files would have been the most convenient source of data, the amount of data maintained on such claims was not sufficient for the needs of the analysis.[22] In order to ascertain which procedures had been undergone by program participants, it was necessary to obtain the more complete claims data maintained by the individual carriers and intermediaries.

In order to build the claims data set that would be most reliable for the purpose at hand, both Part A and Part B claims were obtained. The Part A files contained fewer claims (and were thus easier to search), but the procedure and diagnosis information on the Part A claims was not used for payment and was not subject to extensive quality control. The Part B procedure code was the basis for payment, and the

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[22]For the period covered, the records on the Part A (hospital) files did not consistently contain information on diagnosis and surgical procedures performed, except for the 20 percent of beneficiaries whose records were included on the MEDPAR statistical file. On the Part B (Supplemental Medical Insurance) side, no unified beneficiary claims history with sufficient detail was maintained at the time, and, since each carrier used a different system for coding the procedures, most did not submit the information to HCFA.

data were therefore much more reliable; there were, however, cases where no Part B claim was submitted (most notably, procedures performed in certain teaching hospitals and in other hospitals with staff physicians). In these cases, the Part A record was the only available source of data. Therefore, both types of claims were included on the claims record file.

New York. Claims for beneficiaries in the area served by the New York program were processed by several organizations. At the time of the data collection, most hospitals' Part A claims were processed by Blue Cross and Blue Shield of Greater New York (BCBSGNY); a small number were processed by the Traveler's Insurance Company; and the municipal hospitals in New York City submitted claims directly to HCFA through the Office of Direct Reimbursement (ODR). Part B claims for providers with billing offices in 16 of the 17 counties were processed by BCBSGNY, while claims for providers billing out of the borough of Queens were processed by Group Health Insurance, Inc. (GHI). A small number of Part B claims for physicians with special billing arrangements with the municipal hospitals were processed by ODR. Individual negotiations were conducted with each organization, and all agreed to supply a dump of all records in their files for the sample beneficiaries. The evaluation was responsible for reformatting and merging the data to produce a unified history for each person.

Obtaining the data from Travelers presented special problems. It was the only organization in the area whose data system was not computerized. In addition, the files for services rendered through September 1979 were in storage at the Federal Records Center. These older files were in provider sequence, which is typical of many manual Part A operations, and there was no way to retrieve a beneficiary history without inspecting all files for all providers. Since this type of search of all the files in storage was not feasible, information on these services was not made available to the evaluation. Beginning with services for October 1979, the filing system was changed to beneficiary sequence; therefore, data on participants in the demonstration program from October 1979 to May 1980 were retrieved from the files.

In order to perform the history retrieval, all carriers and intermediaries required a listing of the Health Insurance Claim (HIC) numbers of the sample beneficiaries. These numbers were one of the data items provided by the demonstration on the program record file and were felt to be reliable, having been verified against Medicare enrollment files at program intake to ensure that each (potential) participant had Medicare Part B coverage. This was found not to be a sound assumption, since a portion of the numbers submitted were later found to be invalid. Compared to the HIC numbers listed on a separate file of all second opinion consultation Part B claims

maintained by BCBSGNY (which had been effectively cleaned in order to be merged with the actual Part B history files), 189 (6 percent) of the HIC numbers on the program record file were found to be incorrect. Claims history data could therefore be obtained on 3,066 program participants only (out of the original sample of 3,255).

In order to obtain the Part A data, magnetic tape lists containing the HIC numbers of the participant sample were submitted to the BCBSGNY Part A processing center and to HCFA/ODR, and a hard copy list of 927 participants (with contact dates beginning October 1979) was submitted to Travelers.[23] These organizations queried their history files and produced extract files containing all history on these benficiaries. BCBSGNY and HCFA/ODR produced magnetic tapes, while Travelers produced duplicates of the hard copy bills found in its file for each of the sample beneficiaries.

As a validation of the bill retrieval activities being pursued at the three Part A intermediaries, a fourth inquiry was undertaken at HCFA through the Division of Methods, Systems and Requirements in the Bureau of Program Operations. The list of HIC numbers was run through the Part A Beneficiary Bill History Retrieval System to produce an "Infrequent Users Retrieval Output" (HAINURO) record for each valid HIC number. This record contains a limited amount of data on each inpatient stay on the file and does not include procedure or diagnosis data. This file was originally requested in order to identify Travelers' stays that were inaccessible because of the older file format. (A search for specific bills in storage at the Federal Records Center was feasible where a general file search was not.) It was also used to identify hospitalizations during the surgery coding process (described below).

Before all of the Part A claims data could be processed and merged, the hard copy data supplied by Travelers were coded and entered. The duplicates of the actual bills submitted and supplied by Travelers were in two formats: the HCFA-1453, completed manually by the providers, or the UBF-1 generated by computer, utilizing numeric codes to identify many items where the 1453 uses narrative. Conventions were developed for reconciling the differences in the definition of data items in order to generate a unified, consistent data set. One item where equivalence was forced was diagnosis, where "principal diagnosis" on the UBF was equated with "primary (discharge)

[23]The processing of 308 program records received from the demonstration was delayed, and these cases were not included in the inquiries submitted to HCFA/ODR or Travelers. Since the proportion of beneficiaries with any utilization in hospitals served by these intermediaries was not large (15 percent in ODR, 6 percent in Travelers, based on the experience of the cases that were submitted), the number of excluded stays is considered to be correspondingly small.

diagnosis" on the 1453. In order to facilitate comparison with the program data, the procedure and diagnosis data on the hard copy bills for each beneficiary were recoded using the system (ICDA-8 or ICD-9-CM) used on that person's case in the program record files. The narrative descriptions on the bills served this purpose.

The process of obtaining Part B claims histories was similar to that for Part A, except that no manual activity was involved. Magnetic tapes containing the sample HIC numbers were submitted to BCBSGNY, GHI, and HCFA/ODR, and magnetic tape files containing Part B history for the beneficiaries were supplied by the carriers. The much larger number of claims records to be processed (over 72 million records at BCBSGNY) made this part of the inquiry process more complex than the Part A retrieval, but data on all claims processed from May 1978 to April 1981 were eventually supplied to the evaluation.

Michigan. Retrieval of claims history data on participants in the Detroit program was a much simpler matter, since Blue Cross and Blue Shield of Michigan (BCBSM) processes almost all Medicare claims (Part A and Part B) for hospitals and beneficiaries in the program area.[24] BCBSM used existing history retrieval routines to supply hard copy reports detailing utilization covered by Part A inpatient, Part A outpatient, and Part B. Each participant's history was assembled and compared with the program intake form. All Part B claims for surgery (i.e., with a type of service code signifying surgery, assistance at surgery, or anesthesia) with dates of service after the date of contact with the program were selected for analysis. A uniform set of data items (including date of service, procedure code, reimbursement amount, provider code, and disposition code) was keyed to magnetic tape for use in this analysis.

Data Processing. One of the main problems to be resolved in merging Medicare claims from a variety of sources was the use of different systems for coding medical and surgical procedures by the various carriers and intermediaries.

New York. The Part B carriers had never been required to use consistent coding systems (though there were perennial discussions of such a change). Many used systems based on the California Relative Value Scale (CRVS), subject to greater or lesser modifications. Given this common root, there was a strong resemblance in the codes for similar procedures across different systems. However, the organizations could (and did) make significant alterations to the definition of the procedure(s) linked to each code. No

[24] No hospitals in the Michigan program area submit claims to HCFA/ODR. Three small hospitals are served by Travelers, but these claims were not obtained for this analysis.

two the systems used by carriers included in the analysis used definitions that were similar enough to allow an assumption of equivalence of the codes across the systems.

A computerized translation routine was developed for selected procedures. A computerized matrix allowing the comparison of a code in ICDA-8 (on the program intake form) to any codes used in all of the other Part B systems would have been ideal, but the number of codes involved precluded its development, and available computerized translation routines were investigated and found inadequate. It was, however, considered inefficient to examine each case manually.

A compromise solution was the development of a computerized translation routine for selected procedures. The procedures included in the routine were the group of 34 procedures earlier rated by the physician panels (see Appendix B). These 34 procedures included the surgery proposed in 59 percent of all cases referred to the New York demonstration. A medical records technician (ART), using the manuals for each system, constructed tables listing the code(s) used for each of the 34 procedures in all relevant coding systems. The physician who coordinated the original selection of the 34 procedures and the rating process was consulted to determine the appropriateness of the particular choices.

Due to the differences in the structure of the coding systems, a one-code-to-one-code match was not undertaken. Rather, each one of the 34 procedures was defined in terms of a group of closely related procedure codes, each of which might be used to describe a slight variation in the approach used or some other detail.

There was a problem in the construction of the tables with regard to the "not otherwise specified" (NOS) codes. A procedure in the group might be assigned one of these codes, because of scant information or improper coding, but many other unrelated activities might also be assigned the code. Thus, to exclude it from the group of codes defined as encompassing the specified procedure would result in an undercount, while to include it would result in many "false positives."

Each procedure was considered individually in terms of the range of valid codes available and the range of possible surgical activities that would potentially be assigned the NOS code. For some procedures, these codes were included, and for others they were not. Subsequent findings indicate that neither underinclusiveness nor over-inclusiveness was a significant problem in the final routine.[25]

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[25]Underinclusiveness in the final file was avoided by the fact that all cases that did not meet the criteria of the automated procedure match routine were reviewed manually (as described below), so that any "underincluded" cases would be picked up at that point. Overinclusiveness was tested by the manual validation of 400 cases that met

Exhibit E.12 in Appendix E is an example of the procedure code translation matrix for a single procedure. Note that, though similar codes were used by the different systems, the definitions differ considerably.

To the extent that procedure and diagnosis were coded on the Part A claims, there is general uniformity in the use of the ICD coding systems. The general conversion from use of ICDA-8 to ICD-9-CM was ongoing during the period of the analysis, but it was a gradual, hospital-by-hospital change. This resulted in some problems in interpreting the codes on the data received, since the conversion date for each hospital was not supplied. While the ICD-9-CM codes sometimes contain one more digit than those in ICDA-8, not all ICD-9-CM codes actually use the extra decimal place, so it was not necessarily obvious which system had been used on a particular claim.[26] However, all ambiguous procedure codes on the claims received were able to be resolved by reference to the accompanying diagnosis code.

Michigan. The processing of all claims by a single organization had the same simplifying effect on interpretation of clinical codes as on the claims acquisition. In fact, because the program coded the proposed procedure on the intake form using the same system used to code procedures on the Part B claims, no translation was necessary at all. However, a translation table for the 34 rated procedures (using the BCBSM Part B coding system) was constructed in order to establish groups of codes considered equivalent to each one. This allowed consistent treatment of claims for those procedures in both of the Medicare demonstration sites.

Determining Surgery Outcome. All claims obtained for the program participants included in the surgery decision samples were compared with the data on the program records to determine if the proposed surgery had taken place. The process used was a combination of automated and manual review. Claims where insufficient information was available were assigned to an "unknown" category, rather than to the "surgery" or the "no surgery" category.

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the automated procedure match routine criteria; of these cases, none was found to be improperly included.

[26]The ODR claims presented an additional problem, since the field occupied by the fifth digit of the ICD-9-CM diagnosis code was consistently overwritten with a check digit. Therefore, only four digits of diagnosis code were ever available on the ODR claims, increasing the problem of distinguishing ICDA-8 from ICD-9-CM codes.

As the first step, Part B claims for surgery were selected by screening for type of service flags signifying "surgery," "anesthesia," or "surgical assistance." (In Michigan, this sample of claims had been preselected as part of the abstracting process.) Surgery, as defined by the carriers, is a very inclusive term covering most "invasions of the body" exclusive of inoculations, routine injections, or examinations with tongue depressor or otoscope.

These claims were reformatted as needed, sorted by beneficiary and date of service, and merged with the computerized program record data. Claims with dates of service before the program intake date were dropped from the file and not examined further. The claims for those cases in which the proposed procedure was, according to the program record data, one of the 34 rated procedures (approximately 60 percent) were run through the automated procedure match routine to determine if any of the claims were for the proposed procedure; these cases were considered to have had surgery. The remaining cases, and those for which the proposed surgery was not one of the 34 rated procedures, were listed out for manual review by the medical records technician. In New York, the start and end dates of hospital stays recorded in the summary Part A data on the HCFA Bill History File were used to bracket the claims into known hospital stay episodes. Other claims in New York and all claims in Detroit were grouped into episodes defined as all claims that appeared to be for a single condition occurring within a two-month period. When there was reason for doubt, claims were treated as separate episodes. This was also done when concurrent conditions and treatments made a single characterization of the treatment received during a short period of time impossible.

Each episode was coded by the medical records technician along six dimensions:

Variable 1:	SAME CONDITION	--	Was at least one of the procedure(s) performed during the episode of care performed for the same set of symptoms (diagnosis) as the surgical procedure that was recommended/discussed?
Variable 2:	DX PERFORM	--	Was the procedure performed a diagnostic or a therapeutic procedure?
Variable 3:	DX RECOMMEND	--	Was the procedure recommended/discussed in the program a diagnostic or a therapeutic procedure?
Variable 4:	SAME SURGERY	--	Was at least one of the procedures performed the same as or similar to the procedure recommended?

Variable 5: RELATED SURGERY -- Were the procedures performed during the episode of care, taken as a whole, more, less, or just as extensive as the procedure recommended?

Variable 6: INJECTION -- Was the only procedure performed in the episode of care an injection?

All claims within each episode were considered together, with evaluation of the series of procedures sometimes being more useful than consideration of each claim individually for determining the overall relation of the care received during the episode to the originally proposed surgery. If more than one procedure was proposed and any one of them was performed during the episode, the case was coded as having had the proposed surgery. Exhibit E.13 in Appendix E shows the format used for the surgery coding sheet.

One of the weaknesses in the matching process was the precision of codes based on the data on the presenting diagnosis and proposed surgery as entered in the program records. These items were reported by the participant during the initial call to the referral center and were usually limited by the patient's understanding of the proposing physician's explanations, though the staff at the referral centers were familiar with medical nomenclature and were specifically trained to elicit as much detail as possible. In New York, in the case where the proposing physician's statement of the diagnosis and proposed procedure was obtained, these data were used by the demonstration to assign clinical codes more accurately to these items on the intake form.

In coding the claims histories of cases from both sites, the hard copy program forms were consulted by the evaluation's medical records technician in cases where additional narrative information on the condition and the proposed treatment was needed to judge the surgical outcome of the case. If serious uncertainty concerning the condition for which the surgery was proposed could not be resolved by any other means, the consultant's diagnosis was consulted for possible clarification. This consultation was necessary in only 20 cases, and in none of these did it appear that there was major disagreement between the two physicians. Of course, the consultant's recommended procedure was never used to clarify or modify the data on the proposed procedure.

For the purposes of the analysis, all cases where the outcome could be judged were assigned to either surgery or no surgery status. All cases determined to have had an operation to treat the same condition as that for which surgery was originally proposed (except those cases where therapeutic surgery was recommended but only diagnostic surgery (for the same condition) was performed) were considered to have had

surgery.[27] Cases with no surgery after participation, or with surgery that was clearly for an unrelated condition, were coded as "no surgery." Cases where surgery took place but its relation to the condition for which surgery was originally proposed could not be determined were coded as "unknown" and were excluded from the analysis.

In order to achieve consistent data on all cases and greater precision regarding the cases where one of the 34 rated procedures was both proposed and performed (i.e., those cases screened out by the automated procedure match routine), these cases were manually coded as to the extensiveness of the actual procedure(s) within the episode that matched.

For the New York cases, after the Part B claims were processed, the Part A claims were added to the file and used for several purposes. The first of these was to substitute for the Part B claims from ODR. Very few Part B bills were received from ODR because most of the ODR hospitals billed under the Teaching Amendments to the Social Security Act (i.e., most physician costs were included in a per diem reimbursement rate) and no separate Part B bill was submitted. Of the Part B bills that were submitted to ODR, only those submitted on magnetic tape carried the procedure code on the final history file. None of the three program area hospitals that did not bill under the Teaching Amendments submitted bills on magnetic tape, so none of the Part B records received from ODR carried the procedure code. Therefore, the Part A ODR claims were run through the surgery coding process in place of the Part B claims. The rest of the Part A claims were sorted by beneficiary, and claims for stays with indications of surgery (a surgical procedure code or charges for operating room or anesthesia[28]) were selected. These were matched against the Part B claims, and all Part A stays with an indication of surgery for which no corresponding Part B claims had been found were

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[27]The distinction between diagnostic and therapeutic surgery for the same condition was maintained throughout the coding process. When the extensiveness of related surgery was being coded, a diagnostic procedure accompanying a given procedure within the same episode did not lead to that episode's being coded as more extensive than an episode containing the same procedure without the diagnostic procedure. However, if the recommended procedure was itself a diagnostic procedure and a (very closely related) diagnostic procedure was performed, the episode was coded as "same surgery"; if the proposed procedure was diagnostic and a (related) therapeutic procedure was performed, the episode was coded as "related surgery of greater extensiveness."

[28]Though a "surgical date" was initially used as one of these criteria, it was eliminated because it was too frequently found on claims with no other indication of surgery.

listed out for manual coding of surgery by the medical records technician. One hundred ninety-five out of the 3,066 New York cases had such stays.

In summary, surgical dispositions were assigned to 3,038 of the 3,066 New York cases with HIC numbers included in the sample, while the data on the remaining 28 cases were not sufficient to make a determination. Of the 3,038 cases coded, 1,612 (53 percent) were coded as having surgery for the same condition as the proposed procedure, 1,426 (47 percent) were coded as not having surgery.

Given the judgmental nature of parts of the surgery coding process, it was important to verify the precision and the replicability of the surgery outcome codes assigned to each case. This was accomplished by an intercoder reliability test, where a sample of the cases were recoded by a second medical records technician and the results compared. On determination of whether treatment was for the same condition as the proposed surgery, there was perfect agreement between the two coders; on rating the extensiveness of surgery performed relative to the proposed procedure, there was agreement in 90 percent of the cases.

In New York, the claims records were used to determine whether the procedure was performed on an inpatient or an outpatient basis. The location flags on the Part B claims, the Part A claims, and the HCFA Bill History File were compared. In cases where all agreed as to the location of the surgery, that value was assigned. In cases where the Part B claim indicated that the surgery was done on an inpatient basis and either the Part A claim or the HCFA Bill History verified this, the surgery was assumed to be inpatient. If the Part B indicated inpatient but neither Part A nor HCFA agreed, then the procedure was examined by the medical records technician and a judgment was made as to whether or not the procedure could conceivably be performed on an outpatient basis. If the procedure was complex enough that it could be performed only on an inpatient basis, then that was assumed. If the procedure could be performed on either an outpatient or an inpatient basis, then the entire surgery follow-up file was searched for other claims in which this procedure occurred, and if the other claims were mostly inpatient, then inpatient status was assigned; if the other claims were entirely outpatient, then outpatient was assigned, and if the other claims were mixed outpatient and inpatient, then the setting variable was set to missing.

Of the 1,612 cases with surgery, 90 percent were determined to have been performed on inpatients and 8 percent on an outpatient basis, while the location of 2 percent could not be determined.

Following key entry and verification of the surgery information, the data were incorporated into an analysis file for each program containing all data on each case. In

order to assign a single surgery outcome to each participant, a protocol was developed to determine which episode would be used to assign the surgery outcome codes on the files in cases where several surgical episodes were present:

1. The earliest episode (after program intake) matching on the automated screen for the 34 rated procedures was kept first.

2. The earliest episode manually coded as containing "same or similar surgery" was kept next.

3. The earliest episode containing related surgery for the same condition (except diagnostic procedures performed following proposal of a therapeutic procedure) was kept if neither of the earlier conditions was met.

The resulting files contained the data from the program intake form and consultant reports, the supplemental AMA data on the consultant, and the six surgery variables for 3,038 cases in New York and 262 cases in Michigan

Life Tables. Life table analysis of the estimated rates of surgery for the two Medicare demonstrations was used to evaluate the effect of the length of the follow-up period on the estimate of participants' ultimate surgical outcome. The plots presented in Volume II, Chapter 4 are based on the life tables presented in Tables A.17 through A.22. Tables are presented for all cases in each program, followed by separate tables for cases with confirming and nonconfirming consultations.

Derivation of Cost Estimates. This section describes the derivation of the estimates of the cost to the Medicare program of the surgery undergone by participants in the New York Medicare Demonstration Program that are presented in Volume II, Chapter 4. The estimates were calculated for seven specific procedures and for an aggregate "all other surgery" category.

Part A (hospitalization) reimbursement was estimated as follows:

- The per diem covered charges for all short-term (i.e., less than 40 days) inpatient stays made by a 20 percent sample of Medicare beneficiaries for the year 1977 were obtained from the MEDPAR reports (discussed above). An areawide average was computed for each PSRO in the program area.

- A weighted average per diem for the entire program area was computed by weighting the value for each PSRO by the number of program participants residing in its component counties.

- This estimate for 1977 was adjusted to an estimated level for 1979 by assuming that it increased at the same rate as the medical care component of the Consumer Price Index (CPI).

Table A.17

NEW YORK MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: ALL CASES

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	531	0	3028	3028.0	0.175363	0.000000
1	355	3	2497	2497.0	0.142171	0.175363
2	175	0	2142	2142.0	0.081699	0.292602
3	114	0	1967	1967.0	0.057956	0.350396
4	73	0	1853	1853.0	0.039396	0.388045
5	64	0	1780	1780.0	0.035955	0.412153
6	40	0	1716	1716.0	0.023310	0.433289
7	30	29	1676	1661.5	0.018056	0.446499
8	28	99	1617	1567.5	0.017863	0.456493
9	29	105	1490	1437.5	0.020174	0.466202
10	18	80	1356	1316.0	0.013678	0.476971
11	16	52	1258	1232.0	0.012987	0.484125
12	13	27	1190	1176.5	0.011050	0.490824
13	14	20	1150	1140.0	0.012281	0.496451
14	15	49	1116	1091.5	0.013743	0.502634
15	9	40	1052	1032.0	0.008721	0.509470
16	9	56	1003	975.0	0.009231	0.513747
17	6	83	938	896.5	0.006693	0.518236
18	7	46	849	826.0	0.008475	0.521460
19	9	41	796	775.5	0.011605	0.525516
20	7	49	746	721.5	0.009702	0.531022
21	10	47	690	666.5	0.015004	0.535572
22	7	49	633	608.5	0.011504	0.542540
23	9	62	577	546.0	0.016484	0.547803
24	5	79	506	466.5	0.010718	0.555257
25	3	88	422	378.0	0.007937	0.560023
26	2	49	331	306.5	0.006525	0.563515
27	3	66	280	247.0	0.012146	0.566364
28	0	52	211	185.0	0.000000	0.571630
29	0	49	159	134.5	0.000000	0.571630
30	1	70	110	75.0	0.013333	0.571630
31	0	36	39	20.0	0.000000	0.577342
32	0	1	1	0.5	0.000000	0.577342

Source: Program data on participants from May 1978 to December 1979; Medicare Parts A and B claims data through December 1980.

Table A.18

NEW YORK MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: CASES WITH CONFIRMING CONSULTATIONS

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	490	0	2081	2081.0	0.235454	0.000000
1	315	0	1591	1591.0	0.197989	0.235464
2	154	0	1276	1276.0	0.120690	0.386833
3	101	0	1122	1122.0	0.090018	0.460836
4	58	0	1021	1021.0	0.056807	0.509370
5	49	0	963	963.0	0.050833	0.537242
6	35	0	914	914.0	0.038293	0.560788
7	23	15	879	871.5	0.026391	0.577607
8	21	55	841	813.5	0.025814	0.588754
9	17	57	765	736.5	0.023082	0.599370
10	12	42	691	670.0	0.017910	0.608618
11	12	26	637	624.0	0.019231	0.615628
12	10	13	599	592.5	0.016878	0.623019
13	9	8	576	572.0	0.015734	0.629382
14	5	26	559	546.0	0.009158	0.635213
15	4	17	528	519.5	0.007700	0.638554
16	6	30	507	492.0	0.012195	0.641337
17	4	43	471	449.5	0.008899	0.645711
18	5	24	424	412.0	0.012136	0.648864
19	7	18	395	386.0	0.018135	0.653125
20	4	28	370	356.0	0.011236	0.659415
21	6	24	338	326.0	0.018405	0.663242
22	4	22	308	297.0	0.013468	0.669440
23	6	34	282	265.0	0.022642	0.673892
24	4	34	242	225.0	0.017778	0.681276
25	2	51	204	178.5	0.011204	0.686942
26	0	20	151	141.0	0.000000	0.690450
27	2	33	131	114.5	0.017467	0.690450
28	0	29	96	81.5	0.000000	0.695857
29	0	19	67	57.5	0.000000	0.695857
30	1	32	48	32.0	0.031250	0.695857
31	0	14	15	8.0	0.000000	0.705361
32	0	1	1	0.5	0.000000	0.705361

Source: Program data on participants from May 1978 to December 1979; Medicare Parts A and B claims data through December 1980.

Table A.19

NEW YORK MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: CASES WITH NONCONFIRMING CONSULTATIONS

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	41	0	947	947.0	0.0432946	0.000000
1	40	0	906	906.0	0.0441501	0.043295
2	21	0	866	866.0	0.0242494	0.085533
3	13	0	845	845.0	0.0153846	0.107709
4	15	0	832	832.0	0.0180288	0.121436
5	15	0	817	817.0	0.0183599	0.137276
6	5	0	802	802.0	0.0062344	0.153115
7	7	14	797	790.0	0.0088608	0.158395
8	7	44	776	754.0	0.0092838	0.165852
9	12	48	725	701.0	0.0171184	0.173596
10	6	38	665	646.0	0.0092879	0.187743
11	4	26	621	608.0	0.0065739	0.195287
12	3	14	591	584.0	0.0051370	0.200581
13	5	12	574	568.0	0.0088028	0.204688
14	10	23	557	545.5	0.0183318	0.211689
15	5	23	524	512.5	0.0097561	0.226140
16	3	26	496	483.0	0.0062112	0.233690
17	2	48	467	447.0	0.0044743	0.238450
18	2	22	425	414.0	0.0048309	0.241857
19	2	23	401	389.5	0.0051348	0.245520
20	3	21	376	365.5	0.0082079	0.249394
21	4	23	352	340.5	0.0117474	0.255555
22	3	27	325	311.5	0.0096308	0.264300
23	3	28	295	281.0	0.0106752	0.271385
24	1	45	264	241.5	0.0041408	0.279164
25	1	37	218	199.5	0.0050125	0.282149
26	2	29	180	165.5	0.0120846	0.285747
27	1	33	149	132.5	0.0075472	0.294379
28	0	23	115	103.5	0.0000000	0.299704
29	0	30	92	77.0	0.0000000	0.299704
30	0	38	62	43.0	0.0000000	0.299704
31	0	24	24	12.0	0.0000000	0.299704

Source: Program data on participants from May 1978 to December 1979; Medicare Parts A and B claims data through December 1980.

Table A.20

MICHIGAN MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: ALL CASES

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	36	2	260	259.0	0.138996	0.000000
1	35	7	222	218.5	0.160183	0.138996
2	19	12	180	174.0	0.109195	0.276914
3	2	1	149	148.5	0.013468	0.355872
4	5	4	146	144.0	0.034722	0.364547
5	3	4	137	135.0	0.022222	0.386611
6	2	4	130	128.0	0.015625	0.400242
7	2	1	124	123.5	0.016194	0.409614
8	2	3	121	119.5	0.016736	0.419174
9	2	4	116	114.0	0.017544	0.428895
10	2	3	110	105.5	0.018957	0.438915
11	1	7	99	95.5	0.010471	0.449551
12	1	2	91	90.0	0.011111	0.455315
13	1	3	88	86.5	0.011561	0.461367
14	0	11	84	78.5	0.000000	0.467594
15	0	9	73	68.5	0.000000	0.467594
16	0	6	64	61.0	0.000000	0.467594
17	0	15	58	50.5	0.000000	0.467594
18	1	1	43	42.5	0.023529	0.467594
19	0	3	41	39.5	0.000000	0.480122
20	1	5	38	35.5	0.028169	0.480122
21	0	6	32	29.0	0.000000	0.494766
22	0	1	26	25.5	0.000000	0.494766
23	0	3	25	23.5	0.000000	0.494766
24	0	2	22	21.0	0.000000	0.494766
25	0	1	20	19.5	0.000000	0.494766
26	0	2	19	18.0	0.000000	0.494766
27	2	6	17	14.0	0.142857	0.494766
28	0	3	9	7.5	0.000000	0.566942
29	0	6	6	3.0	0.000000	0.566942

Source: Program data on participants from August 1978 to December 1979; Medicare Part B claims data through December 1980.

Table A.21

MICHIGAN MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: CASES WITH CONFIRMING CONSULTATIONS

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	30	1	165	164.5	0.182371	0.000000
1	32	5	134	131.5	0.243346	0.182371
2	16	8	97	93.0	0.172043	0.381338
3	2	0	73	73.0	0.027397	0.487774
4	5	1	71	70.5	0.070922	0.501808
5	3	3	65	63.5	0.047244	0.537141
6	2	1	59	58.5	0.034188	0.559008
7	1	0	56	56.0	0.017857	0.574085
8	2	2	55	54.0	0.037037	0.581690
9	1	1	51	50.5	0.019802	0.597183
10	1	4	49	47.0	0.021277	0.605160
11	0	3	44	42.5	0.000000	0.613561
12	0	1	41	40.5	0.000000	0.613561
13	0	1	40	39.5	0.000000	0.613561
14	0	7	39	35.5	0.000000	0.613561
15	0	6	32	29.0	0.000000	0.613561
16	0	3	26	24.5	0.000000	0.613561
17	0	7	23	19.5	0.000000	0.613561
18	0	1	16	15.5	0.000000	0.613561
19	0	1	15	14.5	0.000000	0.613561
20	0	2	14	13.0	0.000000	0.613561
21	0	1	12	11.5	0.000000	0.613561
26	0	1	11	10.5	0.000000	0.613561
27	1	3	10	8.5	0.117647	0.613561
28	0	2	6	5.0	0.000000	0.659024
29	0	4	4	2.0	0.000000	0.659024

Source: Program data on participants from August 1978 to December 1979; Medicare Part B claims data through December 1980.

Table A.22

MICHIGAN MEDICARE DEMONSTRATION

LIFE TABLE FOR SURGERY: CASES WITH NONCONFIRMING CONSULTATIONS

Time after program contact (in 1-month intervals)	Number of surgeries during the interval	Withdrawals due to end of observation during the interval	Patients under observation who have not had surgery by beginning of the interval	Patients at risk of surgery at beginning of the interval, adjusted	Probability of surgery during the interval	Probability of surgery by the beginning of the interval
0	6	1	95	94.5	0.063492	0.000000
1	3	2	88	87.0	0.034483	0.063492
2	3	4	83	81.0	0.037037	0.095785
3	0	1	76	75.5	0.000000	0.129275
4	0	3	75	73.5	0.000000	0.129275
5	0	1	72	71.5	0.000000	0.129275
6	0	3	71	69.5	0.000000	0.129275
7	1	1	68	67.5	0.014815	0.129275
8	0	1	66	65.5	0.000000	0.142175
9	1	3	65	63.5	0.015748	0.142175
10	1	5	61	58.5	0.017094	0.155684
11	1	4	55	53.0	0.018868	0.170116
12	1	1	50	49.5	0.020202	0.185775
13	1	2	48	47.0	0.021277	0.202224
14	0	4	45	43.0	0.000000	0.219197
15	0	3	41	39.5	0.000000	0.219197
16	0	3	38	36.5	0.000000	0.219197
17	0	8	35	31.0	0.000000	0.219197
18	1	0	27	27.0	0.037037	0.219197
19	0	2	26	25.0	0.000000	0.248116
20	1	3	24	22.5	0.044444	0.248116
21	0	5	20	17.5	0.000000	0.281533
22	0	1	15	14.5	0.000000	0.281533
23	0	3	14	12.5	0.000000	0.281533
24	0	2	11	10.0	0.000000	0.281533
25	0	1	9	8.5	0.000000	0.281533
26	0	1	8	7.5	0.000000	0.281533
27	1	3	7	5.5	0.181818	0.281533
28	0	1	3	2.5	0.000000	0.412163
29	0	2	2	1.0	0.000000	0.412163

Source: Program data on participants from August 1978 to December 1979; Medicare Part B claims data through December 1980.

- The estimate for 1979 was inflated by 12 percent to adjust for the above-average service intensity and costs of surgical stays. This factor was derived from HCFA data on the comparative costs of surgical and nonsurgical episodes of care.

- Sixty-five percent of the adjusted estimate of per diem covered charges was estimated to be the level of Medicare reimbursement, based again on HCFA Medicare program data.

- The average length of program participants' stays for each procedure category was calculated from the Part A claims histories obtained from Blue Cross Blue Shield of Greater New York (BCBSGNY). These lengths of stay were multiplied by the estimated per diem reimbursement to obtain the average Part A reimbursement for each of the procedure categories.

Reimbursement under Part B (supplementary medical insurance) for each of the procedure categories was estimated as follows:

- The BCBSGNY Part B procedure codes most commonly used in reference to program participants for the specified procedures were identified.

- The prevailing charges for these procedures in the two regions which included the vast majority of program participants were averaged. The value for each region was weighted by the proportion of program participants residing in it. The average charge assigned to the "all other" category was the average of the prevailing charges for the ten procedures most common among all program participants.

- A uniform increment of $173 was added to the estimated charge for each procedure to account for the cost of anesthesia. This amount was based on the experience of other second opinion programs.

- Part B reimbursement for each procedure category was estimated as 78.2 percent of estimated total charges. This factor was developed from HCFA data on national Part B experience.

This estimation process yields only a rough approximation of actual reimbursement for the procedures cited, and there are many caveats that should be cited. Among these are the fact that the Part B estimates do not consider any nonsurgical care; the prevailing charges that are used may well differ from the usual and customary charges of the participants' physicians; the flat anesthesia adjustment does not consider any differences between the various procedures, and may in any case be too small; and the "all other" category, based as it is on a sample of the ten most common procedures, does not necessarily provide a good estimate for the other procedures. It should also be noted that the Part A calculations, based as they are on secondary data, are particularly insensitive to region- and hospital-specific pricing patterns.

Data Limitations. Certain qualifications to the data must be considered in reviewing the analysis performed with the resultant file. With the information available,

it is not possible to assess the absolute quality of the data. It is therefore appropriate to consider the potential flaws in the final analytical file. The two main (possible) problems are that:

- the number of surgery claims detected is inaccurate, or
- the definition of the relationship between the proposed surgery (as noted on the program intake form) and the surgery performed (as recorded on claims records) is inaccurate.

The first problem would occur chiefly as a result of an incomplete claims record due to lagged or nonsubmitted bills. In New York, it could also be due to Part B claims not carrying the procedure code (at ODR) or claims that were not obtained (i.e., ODR and Travelers Part A claims for the 308 records not included in those inquiries and Travelers' claims for dates earlier than October 1979). Claims for surgeries performed outside the program area would also not have been included in the file. The potential incidence of these problems is thought to be nonsystematic and of small magnitude, and thus likely to have little effect on the final analysis results.

The second problem would result from a misunderstanding of the procedure codes on the intake form and/or the claims, due to problems in reconciling the different coding systems, or from a lack of sufficient information to identify accurately the procedure in question. It could also result from faulty or inconsistent judgment in applying the coding rules. This problem is potentially much more damaging, because it affects all of the cases on the file. Fortunately, it is also one that is most directly measured by the intercoder reliability tests; the high agreement scores offer an assurance that its incidence is also minimal.

A.2.3 New York Medicare Demonstration Program — Patient Survey Data

As in Massachusetts, a sample of program participants and a sample of comparison patients were contacted and interviewed in order to assess the impacts of the New York Medicare Demonstration Second Surgical Opinion Program on the degree to which participants obtain second opinions and the effects of the second opinions obtained through the program on participants' surgery decisions. The participant sample was a random sample of persons referred to the New York program during a specified time period. As with the Massachusetts CPES, a comparison sample of nonparticipants was interviewed; however, unlike Massachusetts, it was not possible to find an area in which to interview that was comparable to New York City in all aspects except the presence of the program. This difficulty, plus the low rate of participation in the program, led to the

decision to use a random sample of nonparticipants residing in the program area as the comparison group.

Identification of the Survey Samples. In order to assure sample sizes adequate to permit analysis of the differences of program effects due to the procedure recommended, the New York samples were confined to persons who had considered undergoing one of the 34 procedures for which ratings had been developed by the physician panels (see Appendix B). The program participant sample was a random sample of participants who reported discussing one of these procedures with their surgeon between January 1980 and April 1981. The comparison sample was a random sample of program eligibles (i.e., persons with Part B coverage residing in the 17-county area covered by the program) who had discussed one of the same procedures during the same period.

Again, since information on discussions of surgery was not available from any existing source, a telephone survey similar to that performed in Connecticut was undertaken. The Health Care Financing Administration supplied a tape containing the Health Insurance Master (HIMA) record on a sample of beneficiaries in the 17-county area. The selection criteria were specified to select the records of beneficiaries who:

- had both Part A and Part B coverage (to maximize the amount of information on health care utilization that would be available from Medicare records);
- had at least one year of uninterrupted coverage at the time the sample was selected (to increase the probability that Medicare records would provide complete records of service utilization);
- were aged (since it was felt that the experiences of persons who were eligible for the program through disability or end-stage renal disability would be different from those who were aged, but their numbers would be insufficient to support any separate analysis); and
- resided in the program area.

Since it was felt that residents of New York City itself might respond to the program differently than the residents of Long Island and the ten upstate counties, it was decided to stratify the personal interview survey sample by location, allocating equal numbers of observations to each of the two areas. Therefore, this original sample of Medicare eligibles was selected in order to be similarly divided between the two areas.

The name and address information on the record was used to obtain telephone numbers for the beneficiaries from telephone directories and from directory assistance. The telephone number search was much more successful for this population than for the

Medicaid population in Connecticut; numbers were obtained for 66 percent of the beneficiaries, and it was not necessary to seek any other source of information.

With telephone numbers obtained, the telephone survey could begin. The interviewing took place from March to May 1981, using an instrument very similar to that used in Connecticut (see Appendix E, Exhibit E.14). The two main differences were as follows:

- Since the New York demonstration provided second opinions to persons whose physician had only discussed surgery (without necessarily recommending it), the telephone survey sought nonparticipants whose physicians had either recommended or merely discussed surgery.

- Unlike the Massachusetts CPES, the Medicare demonstration programs offered second opinions for all surgical procedures covered by Medicare. Therefore, the telephone survey sought information on all instances in which elective surgery had been discussed or recommended (though only cases where one of the 34 panel-rated procedures was under consideration were included in the sample for the personal interview survey).

The cluster sample approach was also used in New York, with each call seeking information on all members of the household covered by Medicare.

Overall, a total of 4,218 Medicare households were contacted in order to locate 500 discussions of one of the 34 rated procedures. A number of cases were later excluded from the interview survey sample for various reasons. One respondent turned out to have had surgery on an emergency basis; one respondent's procedure turned out not to be one of the 34; one respondent had two operations for the same condition in the same month (one was dropped from the sample); and six respondents turned out to have used the Medicare demonstration program and were therefore reassigned to the program participant sample.

As in Massachusetts, it was a more straightforward matter to select the program participant sample. Using the data that the demonstration supplied on each participant (see Section A.2.1), a random sample of cases was selected from all cases that had been referred between January 1980 and April 1981 and where the procedure under consideration was one of the 34 rated by the physician panels, for a total of 1,330. This sample, like the telephone survey sample, was stratified by New York City/non-City location; however, the additional prior knowledge available on program participants allowed further refinement of the sample. Due to a preponderance of cataract cases among program participants, the sample was also stratified by procedure into two categories (cataract/noncataract) with the former slightly undersampled in order to assure adequate representation of the other procedures. Also, knowledge of the

outcome of the program second opinion was used to oversample nonconfirmations so that they accounted for one-half of the sample cases.

As a final step, the distribution of cases by procedure for the two samples was compared. Procedures for which few or no observations were available from one of the sources were excluded from both samples. The net result was a survey sample of 567 program participants and 411 comparison patients.

Fielding the Survey. A procedure-specific protocol for determining the timing of the interviews used in Massachusetts and Connecticut (see Section A.1.5) was also used in New York. Thus, in order to schedule the field interviews, it was similarly necessary to conduct telephone follow-up with all members of the program participant sample and with 150 members of the comparison sample who had not undergone surgery at the time of the initial telephone survey to ascertain if (and when) surgery had taken place and/or if (and when) it was planned. Out of the 717 cases requiring follow-up, 595 (83 percent) were successfully followed up. The follow-up periods used for the procedures included in the survey are presented in Table A.23.

As in the Medicaid sites, the personal interviews were conducted by trained interviewers employed by local field services. The interviews also averaged between 45 and 90 minutes (though here more interviewers reported problems with overly talkative respondents) and were conducted in the home with the patient for whom surgery was recommended. Refusals in the field, by respondents who had agreed to be interviewed after receiving an advance letter and telephone call from the interviewer, were more of a problem in New York City than in any other site. To address this issue, special arrangements were made for the Social Security offices serving the program area to be prepared to respond to inquiries from beneficiaries. In addition to being alerted to the existence of the study (so that they could confirm its legitimacy), they were also provided with lists of names of the specific interviewers employed on the project, so that they could reassure hesitant respondents that the specific person seeking to interview them was a bona fide agent of the government.

Interviewing began in August 1981 and was halted in December 1981 as a result of changes in the project's scope of work. At that time, 38 cases were awaiting assignment to the field and 37 were in the field but had not yet reached final status. The final completion rate for the survey was 55 percent.

Information Collected. The survey instrument used for the New York survey was identical to the instrument used in the Medicaid sites (see Appendix E, Exhibit E.5) with the exception of a few questions that were specifically omitted in the interviewing of Medicare beneficiaries. The set of procedure-specific supplements completed by the

Table A.23

NEW YORK MEDICARE DEMONSTRATION

FOLLOW-UP INTERVALS FOR SCHEDULING PERSONAL INTERVIEWS WITH PROGRAM PARTICIPANTS AND COMPARISON PATIENTS (IN MONTHS)

Procedure	Cases with surgery	Cases where surgery was only discussed
Hemorrhoidectomy	1	2
Cholecystectomy	6	7
Cataract removal	1	2
Tonsillectomy and/or adenoidectomy	12	13
Primary inguinal herniorrhaphy	3	4
Prostatectomy (open or transurethral)	3	4
Hysterectomy	6	7
Ureterolithotomy	12	13
Cystoscopy	6	7
Cystoscopy with excision/destruction of local lesion of bladder	6	7
Peripheral iridectomy	1	2
Anterior colporrhaphy	6	7
Filtration procedure for glaucoma	6	7
Mastectomy	6	7
Ligation/excision of varicose veins	6	7
Total hip replacement	6	7
Keller procedure (bunionectomy)	12	13
Meniscectomy	12	13
Lumbar laminectomy for disc excision	6	7
Cardiac revascularization	12	13
Section of transverse carpal ligament	6	7
Carotid thrombo-endarterectomy	12	13
Anterior cervical discectomy and fusion	12	13
Thoracotomy	3	4
Insertion or replacement of electric heart device	12	13
Ileo-femoral bypass	6	7
Dilation and curretage over age 65	12	13
Dilation and curretage under age 65	12	13
Elective resection of colon	6	7
Breast biopsy or excision	3	4
Submucous resection	6	7

Medicare beneficiaries, however, did differ somewhat from those used for the Medicaid population, since the Medicare demonstration covered a wider range of procedures.

Medicare respondents were asked to sign a form granting permission for the project to access their Medicare program records, and a second form granting permission for the project to contact their physician(s) and for the physician(s) to release information to the evaluation. However, since both of these activities were deleted from the scope of the project, final statistics on the respondents' rate of cooperation were not compiled.

Data Processing. The completed survey questionnaires were edited, coded, entered, and verified by the Abt Associates survey research group using standard methods. Codes were constructed for selected items with open-ended response categories; allowable values tests and cross-item consistency tests were used to verify that the instrument had been administered and entered correctly. The clinical data (the patient-reported diagnosis[es] and surgical procedure[s]) were coded by a trained medical records technician according to the ICD-9-CM classification.

Weighting the New York Data for Analysis. As described in Volume II, Sections 3.7 and 4.6, analysis of the survey sample revealed a small, systematic response bias; program participants who had "followed the instructions" of their physicians (i.e., those who had undergone surgery after recommendations by their physicians and those who had forgone surgery after a nonconfirmation) were more likely to have completed the interview than those who had not. To offset this bias, cases in each category were weighted differentially in order to assign them weights proportional to their distribution in the survey sample. This was accomplished as described in the next sections.

Weighting the New York Program Sample. From a sampling frame of 1,330 program participants, 567 were selected to receive follow-up telephone calls to discuss their experience with the second opinion program and to schedule a face-to-face interview. Of these, 108 could not be contacted (refused, deceased, moved, nonworking telephone, etc.).

The distribution of program participants in the sampling frame is given in Table A.24. The fractional entry in the New York City, nonconfirm, noncataract cell requires some explanation. This cell originally contained 181 participants. One was subsequently found to be under 65 and therefore ineligible. This individual was excluded from the follow-up sample. Since the original follow-up sample contained 157 people in this cell, the best estimate of the number of ineligible people in the New York,

Table A.24

NEW YORK MEDICARE DEMONSTRATION

DISTRIBUTION OF SAMPLING FRAME FOR PROGRAM PARTICIPANTS

Procedure	Outside New York City		New York City		Total
	Confirm	Nonconfirm	Confirm	Nonconfirm	
Cataract	69	31	289	149	538
Noncataract	121	52	438	179.85	727.85
Total	190	93	727	328.85	1,328.85

Source: Program records on participants from January 1980 through April 1981.

nonconfirmed, noncataract cell of the sampling frame is 181/157 = 1.15. Subtracting this from 181 gives the adjusted figure of 179.85, which appears in the table.

The 461 program cases who responded to the follow-up telephone call were distributed according to Table A.25, and the 292 participants with whom face-to-face interviews were completed were distributed as shown in Table A.26. Responses are clearly not distributed randomly across the cells of the table. Patients who complied with the consulting physician's recommendation were more likely to respond than those who did not, as Table A.27 demonstrates. Patients who were confirmed for surgery and had surgery and patients who were not confirmed and did not have surgery responded more frequently than others in the follow-up sample.

The sample of 292 completed interviews must be weighted to account for the stratification by place of residence, procedure, and confirmation status and to correct for this differential response rate. Weights were computed according to the formulas below. Let:

F_i = the number of program participants in cell i (the original adjusted sampling frame)

FU_i = the number of program participants in cell i with completed follow-up

SFU_i = the number of program participants in cell i with completed follow-up who reported having had surgery in the follow-up (including those who reported that they were planning on having it in the two months subsequent to the follow-up)

$NSFU_i$ = the number of program participants in cell i who completed follow-up and had not had and were not planning on having surgery

SC_i = the number of completed interviews in each cell with people who reported having surgery in the follow-up

NSC_i = the number of completed interviews in each cell with people who reported not having had surgery in the follow-up

W_{S_i} = the weight for surgery respondents in cell i who reported having had surgery at follow-up

W_{NS_i} = the weight for survey respondents in cell i who reported not having had surgery at follow-up

then

$$W_{S_i} = \frac{1}{[(FU_i/F_i) \times (SC_i/SFU_i)]}$$

$$= (F_i/FU_i) \times (SFU_i/SC_i)$$

Table A.25

NEW YORK MEDICARE DEMONSTRATION

SURGERY STATUS AT TIME OF FOLLOW-UP TELEPHONE CALL
FOR PROGRAM PARTICIPANTS WHO RESPONDED TO CALL

Procedure	Outside New York City				New York City			
	Confirm		Nonconfirm		Confirm		Nonconfirm	
	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery
Cataract	20	11	4	22	24	9	14	24
Noncataract	30	11	15	28	93	39	30	87
Total	50	22	19	50	117	48	44	111

Source: Telephone interviews with a sample of program participants from January 1980 through April 1981.

Table A.26

NEW YORK MEDICARE DEMONSTRATION

SURGERY STATUS AT TIME OF FOLLOW-UP TELEPHONE CALL
FOR PROGRAM PARTICIPANTS WHO COMPLETED FACE-TO-FACE INTERVIEWS

Procedure	Outside New York City				New York City			
	Confirm		Nonconfirm		Confirm		Nonconfirm	
	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery
Cataract	18	4	1	11	16	5	8	21
Noncataract	22	6	9	22	64	20	10	55
Total	40	10	10	33	80	25	18	76

Source: Telephone and in-person interviews with a sample of program participants from January 1980 through April 1981.

Table A.27

NEW YORK MEDICARE DEMONSTRATION

RESPONSE RATE AMONG FOLLOW-UP RESPONDENTS IN PROGRAM PARTICIPANT SURVEY SAMPLE, BY SECOND OPINION OUTCOME AND SURGERY STATUS AT FOLLOW-UP

Surgery decision (at follow-up)	Second opinion outcomes	
	Confirm	Nonconfirm
Surgery	72% (167)	44% (63)
No surgery	50% (70)	68% (161)
Total	65% (237)	61% (224)

Source: Telephone interviews with a sample of program participants from January 1980 through April 1981

Note: Numbers in parentheses are the total number of follow-up respondents in each cell.

and

$$W_{NS_i} = (F_i/FU_i) \times (NSFU_i/NSC_i)$$

Weights for each cell are shown in Table A.28. Cell entries in Table A.26 weighted by entries in Table A.28 sum to 1328.85.

Weighting the Comparison Sample. This sample included a total of 411 Medicare beneficiaries who reported having discussed an eligible procedure with a physician during the initial telephone survey. Of the cases who had not undergone surgery and thus required a telephone follow-up before the interview could be scheduled, nine could not be interviewed and five were awaiting follow-up at the time that the survey was terminated. Of the remaining 397, 287 underwent surgery and 110 did not. Personal interviews were completed with 169 respondents. Table A.29 shows surgery status at follow-up by surgery status as of initial phone contact. Numbers in parentheses represent numbers of completed interviews in each cell. Three of the cells contain completed interviews and are weighted by the following formula:

$$W_i = (F_i/C_i \times 169/411)$$

where F_i is the size of cell i and C_i is the number of completed interviews in cell i. The term 169/411 is simply the ratio of completed interviews to sample size. The 14 respondents for whom there is no follow-up were divided proportionally between the surgery and no-surgery columns. The weights are thus computed as:

$$W_1 = 266/114 \times 169/411 = 0.959$$

$$W_2 = [(110 + (14 \times 110/131))/53] \times 169/411 = 0.945$$

$$W_3 = [(21 + (14 \times 21/131))/2] \times 169/411 = 4.779$$

A.2.4 New York Medicare Demonstration Program — Determining the Effect on Participant Surgery Decisions

As in Massachusetts, one of the central questions to be addressed with the data collected by the survey was the extent to which the second opinion program affected the surgery decisions of its participants. Volume II, Section 4.6.2, derives estimates of this effect based on patients' appraisal and evidence of their changes in plans regarding surgery. The method used to accomplish this in the Medicaid sites is presented in Section A.1.5; the approach used for for the Medicare sample was intended to be as similar as possible. There were, however, certain modifications that were made due to the

Table A.28

NEW YORK MEDICARE DEMONSTRATION

WEIGHTS FOR THE PROGRAM PARTICIPANT SURVEY SAMPLE

Procedure	Outside New York City				New York City			
	Confirm		Nonconfirm		Confirm		Nonconfirm	
	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery	Surgery	No surgery
Cataract	2.47	6.12	4.77	2.38	13.14	15.76	6.86	4.48
Noncataract	4.02	5.41	2.02	1.54	4.82	6.47	4.61	2.43

Table A.29

NEW YORK MEDICARE DEMONSTRATION

COMPARISON PATIENT SURGERY STATUS AT FOLLOW-UP
BY SURGERY STATUS AT INITIAL PHONE CONTACT

Surgery status at initial contact	Surgery status at follow-up		
	Surgery	No surgery	No follow-up
Surgery	266 (114)	0 (0)	0 (0)
No surgery	21 (2)	110 (53)	14 (0)
Total	287 (116)	110 (53)	14 (0)

Source: Telephone interviews with a sample of program-eligible nonparticipants.

Note: Numbers in parentheses represent completed personal interviews.

differences in the two types of programs (e.g., the absence of desk audit criteria in New York). Respondents were assigned to the same four effect categories.

- respondent was unaffected by program;
- respondent changed plans and underwent surgery as the result of experience with the program;
- respondent changed plans and did not undergo surgery as the result of experience with the program; or
- the effect of program experience could not be determined.

However, the survey data were used to allocate respondents to one of these categories according to the following (slightly modified) rules:

The first four rules rely on answers to the following questions from the interview form.

12. After talking with (FIRST DOCTOR) in (FIRST REFERENCE MONTH), did you think that you would have surgery to treat your condition in the near future? (yes, no)

15. Since your (FIRST REFERENCE MONTH) discussion with (FIRST DOCTOR) about surgery, have you had an operation for your (CONDITION)? (yes, no)

40. After talking with (SECOND DOCTOR) in (SECOND REFERENCE MONTH) did you think that you would have surgery to treat your condition in the near future? (yes, no)

44. If you had not obtained a second opinion, do you think that you ...

1. definitely would have made the same decision?
2. probably would have made the same decision?
3. probably would not have made the same decision?
4. definitely would not have made the same decision?

Rule 1. If the respondent answered 'no' to questions 12, 15, and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 1 or 2 to question 44, then the respondent was judged to be unaffected by the program.

Rule 2. If the respondent answered 'yes' to questions 12, 15, and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 1 or 2 to question 44, then the respondent was judged to be unaffected by the program.

Rule 3. If the respondent answered 'no' to question 12 and 'yes' to questions 15 and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 3 or 4 to question 44, then the respondent was judged to have changed plans and to have undergone surgery because of the program.

Rule 4. If the respondent answered 'yes' to question 12 and 'no' to questions 15 and 40 (after ascertaining that the 'SECOND DOCTOR' was the program doctor) and if the respondent gave answer 3 or 4 to question 44, then the respondent was judged to have changed plans and to have forgone surgery because of the program.

Rules 1 through 4 failed to classify 152 observations. In nearly every instance this failure could be attributed to one of the following:

- Contradictory responses. Some respondents, for example, reported that they planned on surgery after their initial visit and did not plan on surgery after they visited the consultant physician (thus indicating a change of plans) but also reported that they would have made the same decision in the absence of a second opinion.

- Failure to undergo planned surgery. Some respondents who plan on surgery through two or more physician visits never report having the surgery. This situation frequently results from unforeseen changes in circumstances.

- Uncertain responses. Rules 1 and 2 do not classify anyone who responded 'don't know' to questions about surgery plans.

These 152 observations were classified by examination of the interview forms themselves. In each of these cases, observations were classified by their answers to the following open-ended interview questions:

43. In what way did the second opinion you obtained influence your final decision about surgery?

125. What was the main reason you decided to have this surgery?

128. What was the main reason you decided not to have this surgery?

Rule 5. If the respondent answered Questions 43, 125, or 128 in such a way as to indicate that the second opinion dissuaded the respondent from carrying out the plans that he or she had formulated after the initial physician visit, then plans are judged to have changed for or against surgery, as appropriate. Since initial plans are often unclear, even to the respondent, this judgment was frequently difficult to make. Respondents who referred to greater trust in the second opinion physician or objections to the second opinion requirement as a reason for changing plans, for example, were coded as changing their plans because of the program.

If the respondent answered Questions 43, 125, or 128 in such as way as to indicate that other factors accounted for their change of plans (for example, fear of surgery or improvement in the patient's condition) or if respondent makes no mention of the second opinion in answering these questions, then the respondent was judged to have been unaffected by the program.

Rule 5 is probably a conservative rule. It is more likely that the second opinion caused people to change their minds even though they didn't mention it, than that something other than the second opinion caused people to change, even though the response indicates that the second opinion made the difference. Thus, our estimate of the total number of individuals who changed their plans as a result of the second opinion program is most likely a lower bound on the true number.

Finally, there were 18 cases that could not be classified using any of the decision rules developed. These were assigned to the "effect could not be determined" category.

A.3 Data for the Analysis of the National Second Surgical Opinion Program

The analysis of the National Second Surgical Opinion Program (NSSOP) was based on data from two sources. The first was logs maintained by a sample of program list holders for approximately two years. These collected information on every call that was received on the line designated to receive NSSOP calls, and are described in Section A.3.1. The other source of data was a follow-up survey of a sample of NSSOP callers. This effort is described in Section A.3.2.[29]

A.3.1 NSSOP - Log Data Collection

In the latter part of 1979, a stratified random sample of the approximately 150 organizations participating as list holders in the National Second Surgical Opinion Program (NSSOP) were enlisted to collect data on all NSSOP calls that they received in order to gather information on a sample of program users. For almost two years (January 7, 1980 to December 4, 1981) these organizations used a log form (see Appendix E, Exhibit E.15) to record information on every call they received. Completed logs were submitted to Abt Associates approximately monthly. Over the course of the data collection, a total of 3,768 completed logs were submitted by these list holders. The number of logs submitted by each list holder is shown in Table A.30.

The logs submitted by the list holders were processed quarterly. The data were coded, edited, and entered by the Abt Associates Survey Research Group. Clinical data (diagnosis and surgical procedures) were coded by a trained medical records technician (ART) according to the ICD-9-CM classification system. Special conventions were developed to deal with patient-reported data that were insufficient for coding into ICD-9-CM.

A.3.2 NSSOP — Follow-up Survey Data

The sample for the follow-up survey of callers to the NSSOP was selected based on the completed log instruments. From the 3,768 completed logs, cases that met the following criteria were selected into the follow-up sample.

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[29]Over the course of this data collection, all of the data collected on the NSSOP were summarized and published in a series of quarterly reports. The last of this series, which summarizes all of the data collected, is Goldberg et al., Callers to the National Second Surgical Opinion Program: Final Report, April 30, 1982, Cambridge: Abt Associates Inc.

Table A.30

NSSOP

NUMBER OF TELEPHONE CALL LOGS RECEIVED BY LIST HOLDER

List holder	Number (percent)
Social Security District Office Fairbanks, Alaska	0 (0.0%)
Prudential Milville, New Jersey	490 (13.0%)
Mutual of Omaha Omaha, Nebraska	60 (1.6%)
Central Massachusetts PSRO Worcester, Massachusetts	77 (2.0%)
Five County PSRO New Hartford, New York	30 (0.8%)
Central Maryland PSRO Towson, Maryland	190 (5.0%)
Prudential Atlanta, Georgia	144 (3.8%)
South Carolina Medical Care Foundation Columbia, South Carolina	111 (2.9%)
Northern Illinois PSRO Rockford, Illinois	44 (1.2%)
Metropolitan Life Insurance Lexington, Kentucky	55 (1.5%)
Blue Shield of Florida Jacksonville, Florida	1,083 (28.7%)
Blue Cross and Blue Shield of Minnesota Saint Paul, Minnesota	41 (1.1%)
Nationwide Mutual Insurance Columbus, Ohio	216 (5.7%)
Blue Shield of Pennsylvania Camp Hill, Pennsylvania	1,204 (32.0%)
Blue Shield of Utah Salt Lake City, Utah	23 (0.6%)
Total	3,768 (100.0%)

Source: Respondents to an intake survey of persons who called or for whom a call was made to one of the 15 sampled list holders from January 7, 1980 through December 4, 1981.

- Caller had contacted the list holder between October 27, 1980 and August 22, 1981.
- Caller was seeking a second surgical opinion.
- Caller had reached the appropriate list holder for his/her area of residence.
- Caller had discussed surgery with a physician.
- Caller had received at least one consultant name from the list holders.
- Caller had consented to be contacted for follow-up.
- Caller had provided name and telephone number to the list holder.

Over the course of the data collection, a total of 625 cases met these criteria. These cases constituted the follow-up survey sample.

Survey Implementation. Interviews were conducted during the last week of each month. The instrument used is included as Exhibit E.16 in Appendix E. In general, callers were contacted between 90 and 120 days after their contact with the list holder. (In some cases, delayed submission of the logs by the list holder resulted in callers' being contacted after a much longer period had elapsed.) A total of 422 interviews were successfully completed.

The completed survey questionnaires were, like the logs, processed quarterly by the Abt Associates Survey Research Group. Clinical data were coded using ICD-9-CM as well as the special conventions developed for coding the logs. The data were coded, edited, and entered using standard methods, and cleaned using allowable value tests and cross-item consistency tests.

Appendix B

PHYSICIAN SELECTION OF OPERATIVE PROCEDURES AND THE DEVELOPMENT AND ASSESSMENT OF MEASURES OF HEALTH OUTCOMES

Appendix B[1]

PHYSICIAN SELECTION OF OPERATIVE PROCEDURES AND THE DEVELOPMENT AND ASSESSMENT OF MEASURES OF HEALTH OUTCOMES

The specificity of health measures used in this study is an important issue. From a clinical viewpoint, ideal measures would be indicators of health outcomes specific to procedure and diagnosis. Such measures would permit the most precise clinical evaluation to be made for each individual case. However, such specific outcome indicators could not readily be aggregated across procedures. For example, how could the relief of rectal pain after hemorrhoidectomy be compared with restored vision after cataract surgery? Since this study looks at the overall health impact of participation in a second opinion program, more general measures have been selected for the primary data set. The main advantage of using general (or generic) measures is that it is then possible to aggregate data across the variety of elective surgical procedures selected for study. Aggregating across procedures produces a larger sample of persons who are similar on most of the major measures of health status outcome. This is important because the most sensitive tests of differences between participants and nonparticipants occur in groups with the largest number of observations.

An additional advantage of this approach is that it obtains the data in a way that permits their broadest applications at the least possible expense. Data describing in general terms the health outcomes from a variety of medical and surgical treatments are collected in a uniform way; there is no need to devise diagnosis-specific or procedure-specific data collection instruments. This greatly reduces the sheer quantity of data items that must be collected and processed.

B.1 Data Concerning Operative Procedures

For the study of health outcomes, we had to obtain information about the health outcomes typically associated with various elective surgical procedures, and then relate this information to those characteristics of the surgical procedures that are likely to affect the utility of a second opinion program. Two major activities were involved in making these determinations. First, we had to identify the operative procedures to be

[1]This page and Sections B.1 and B.2 are reprinted from Poggio, Eugene C. et al., "Evaluation of Second Surgical Opinion Programs: Research Objectives and Methodology." Mimeographed. Cambridge, Massachusetts: Abt Associates Inc., 1980.

used and, second, obtain information about the major clinical characteristics associated with each of them. The rationale and results of these two activities are presented below.

B.1.1 Selection of Operative Procedures.

Selection of the elective surgical procedures to be included in this study was made by panels of physician experts after preliminary research was performed by project staff. Professional judgment was required to define an "elective" procedure and to select from among the many candidates those that met this definition. For example, operations exclusively performed for treating cancers were eliminated on the grounds that they are outside the professionally accepted definition of "elective."

The final selection of the surgical procedures was based on the panel's assessment of the following information.

- The panel was given itemized listings of all surgical procedures for which any second surgical opinion consultations had been sought over the preceding six months in the New York Medicare demonstration program. All these procedures were considered priority candidates for inclusion in the study.
- All procedures covered by the Massachusetts CPES were considered priority candidates.
- Any additional discrete surgical procedures found to be relatively common[2] among the over-65 age population (as listed in the most recent utilization statistics compiled by the National Center for Health Statistics) were considered candidates.
- Any procedures that, in the opinion of the panel, were likely to be especially prone to overutilization were also considered, regardless of target population or utilization statistics.

The panel then systematically reviewed surgical procedures appearing on each of the above lists and applied the following selection criteria:

- The procedure must be "elective" in the typical case, meaning that it should be deferrable for at least two weeks and not typically or exclusively performed for known cancers.
- The procedure must be discrete. It should not be a categorical label for multiple operations, nor should it involve significant variants in method or technique.

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[2] A "common" surgical procedure was arbitrarily defined as one with a frequency of occurrence of 60 or more per 100,000 population aged 65 and over.

- The procedure must be common enough so that an appreciable number of cases can be encountered annually in the study population.

Thirty-four elective surgical procedures met these criteria and were selected by the panel.

The generic panel agreed with the study staff that all ratings of operative procedures should be made diagnosis-specific. While some therapeutic surgical procedures are used to treat a single clinical condition, most of the more common elective procedures are performed to treat multiple diagnoses. This recognized fact is important to the health outcome substudy because it mandates the collection of diagnosis-specific survey data for most surgical procedures. No attempt was made to develop ratings for diagnoses that accounted for less than 10 percent of the frequency of any surgical procedure. In all, the various panels developed 73 diagnosis-specific generic ratings for 34 common elective surgical procedures. These operative procedures and diagnoses are listed in Table B.1.

B.1.2 Data Collected Concerning Operative Procedures

All data concerning typical characteristics of operative procedures were obtained especially for this study. These data represent the judgments of panels of expert physicians representing the professional societies of their respective specialties.

The identification of appropriate measures for comparisons across elective surgical procedures (i.e., generic measures) was a major task for the panels. In preparation for panel work sessions, the staff reviewed the literature to preselect those generic measures of health status that were used in other clinical outcome studies of comparable purpose and design. These measures were typified by posttreatment pain and activity impairments. The panels examined these measures and made a few modifications in order to adapt them to the present study. The panel also added measures regarding the assessment of outcomes of surgical interventions per se. These latter measures included items concerning the therapeutic objectives of recommended surgical procedures and postoperative patient incapacitation due to such treatment. They also contributed a number of items unique to this study concerning differences in health outcomes as perceived by patients and physicians and as perceived by first and second opinion physicians.

Once all the above measures were agreed upon through consensus votes, they were incorporated into a uniform rating sheet, which is presented as Exhibit E.17 in Appendix E. All panels used this rating sheet to characterize the surgical procedures within their specialty. This method assured that the ratings were obtained in a uniform

Table B.1

ELECTIVE SURGICAL PROCEDURES AND DIAGNOSES OR CLINICAL CONDITIONS FOR WHICH PANEL RATINGS WERE OBTAINED

Operative procedure	Associated diagnoses
Breast biopsy or excision	Palpable mass Suspicious or positive mammogram
Cholecystectomy	Symptomatic gallstones Asymptomatic gallstones
Hemorrhoidectomy	Combined hemorrhoids
Herniorrhaphy	Inguinal hernia
Mastectomy	Invasive carcinoma Medullary in situ intraductal carcinoma
Resection of colon	Diverticulitis
Ileo-femoral bypass	Aortoiliac obstruction Abdominal aneurism
Ligation/excision of varicose veins	Superficial varicosities Varicose ulcers Superficial thrombophlebitis
Cardiac revascularization	Angina Congestive heart failure Anatomic disease
Electric heart device (pace maker) insertion or replacement	Heart block Arrhythmias
Thoractomy (other than for open heart)	Malignant disease Benign disease
Anterior cervical discectomy and fusion	Herniated, extruded or protruded disc Degenerative cervical disc with spondylosis Posttraumatic cervical instability
Carotid thrombo-endarterectomy	Carotid stenosis--symptomatic Carotid stenosis-asymptomatic
Lumbar laminectomy for disc excision	Extruded intervertebral disc Herniated/protruded intervertebral disc Degenerated intervertebral disc
Section of transverse carpal ligament	Carpal tunnel syndrome
Keller procedure (bunionectomy)	Bunions (alone) Hallux rigidus Hallux valgus with bunions
Meniscectomy	Torn ligament Degenerated ligament Cystic ligament
Total hip replacement	Osteoarthritis Posttraumatic arthritis Rheumatoid arthritis
Cataract removal	Adult cataract
Filtration procedure for glaucoma	Open angle glaucoma
Peripheral iridectomy	Acute narrow angle glaucoma Chronic narrow angle glaucoma Anatomical narrow angle glaucoma
Adenoidectomy (without myringotomy)	Upper airway obstruction Serious otitis media
Adenoidectomy with myringotomy/tube insertion	Serious otitis media
Tonsillectomy	Chronic tonsillitis Recurrent acute tonsillitis Obstructive hypertrophy of tonsils

Table B.1
(continued)

ELECTIVE SURGICAL PROCEDURES AND DIAGNOSES OR CLINICAL CONDITIONS FOR WHICH PANEL RATINGS WERE OBTAINED

Operative procedure	Associated diagnoses
Tonsillectomy with adenoidectomy	Recurrent chronic tonsillitis with nasopharyngeal obstruction
Anterior colporrhaphy	Cystocoele
Dilation and curettage of uterus (under age 65)	Incomplete abortion Abnormal uterine bleeding Atypical pap smear
Dilation and curettage of uterus (over age 65)	Postmenopausal bleeding Abnormal pap smear (dyplasia or neoplasia)
Hysterectomy	Prolapse Myomas Undiagnosed pelvic mass
Cystoscopy	Urinary infection Hematuria Voiding dysfunction
Cystoscopy with excision/ destruction of local lesion of bladder	Carcinoma of bladder Papilloma Polyp
Prostatectomy, open	Benign prostatic hypertrophy
Prostatectomy, transurethral	Benign prostatic obstruction Malignant prostatic obstruction Symptomatic nonobstructive "prostatosis"
Ureterolithotomy	Ureteral calculus, uncomplicated Ureteral calculus with fever Ureteral calculus with obstruction

manner, with commonly accepted definitions for all key terms, and with identical response scales. Thus, comparability was achieved in the characterizations of all the surgical procedures included in the study.

The variables for which expert judgments concerning operative procedures were made are listed in Table B.2. Applications for the evaluation of these data regarding operative procedures are many. For one, the data can be used to identify those surgical procedures for which second opinion programs are likely to exert a beneficial or detrimental health impact. Data on operative procedures are necessary to establish criteria for determining the quality of first and second surgical opinions (i.e., the basis for confirmations and nonconfirmations). Information about operational procedures also helped to determine the optimal timing for collecting data concerning health outcomes and was used in the conversion of both generic and procedure-specific characterizations into measures employed in the patient survey.

B.2 Data Parameters for the Validation of Generic Measures

The generic measures can be validated against sets of clinical measures that are relevant to particular operative procedures. Three questions arise: Which clinical measures? Chosen by whom? and, Which surgical procedures should be selected for validation? The discussion that follows addresses these three questions.

The first step in the selection process was to analyze the generic ratings on key health parameters to look for diversity. This was done so that the generic measures could be validated for extremes in the clinical status of patients likely to be encountered across the spectrum of elective surgical procedures encompassed by the programs. It was also desirable that these procedures be relatively common, in order to assure an adequate number of cases for study within the data collection period. Finally, it was desirable that such procedures display varying degrees of professional consensus concerning the indications for performing them, so that the generic measures might be shown to apply across this dimension.

Table B.3 shows the list of procedures selected by the staff to meet the above criteria. A key point settled by this selection list was the identification of medical specialties for which panels were needed to develop procedure-specific ratings.

To establish properly the validity and reliability of the generic health measures, five surgical specialty panels were required: general surgery, ophthalmology, otolaryngology, urology, and gynecology. These panels met for one or two days, depending upon their work load. Their first task was to review the generic panels' ratings for all procedures within their respective specialties. Then they prepared their own

Table B.2

VARIABLES RATED BY PANELS OF PHYSICIANS

Dependent variables

Health status at time of outcome assessment (Posttreatment)

Pain: severity and persistence*

Rate of serious morbidity

Psychological distress*

Personal activities impairment*

Response to treatment (change in health status)*

Independent variables

Health status prior to treatment

Pain: severity and persistence*

Rate of serious morbidity

Psychological distress*

Personal activities impairment*

Clinical condition

Diagnosis appropriate to surgical procedure*

Expected accuracy/inaccuracy of diagnosis

Evidence for efficacy of surgical procedure

Expected clinical course with no treatment*

Expected clinical course with non-surgical treatment*

Expected clinical course with surgical treatment*

The effect of age on indications for surgery

The effect of age on clinical outcomes of treatment*

* Denotes variables given ratings at the level of operative procedures that are also collected at the level of patient cases using survey instruments.

Table B.2 (continued)

Deferrability of treatment (e.g., surgery)

Therapeutic objectives*

Best time to assess health outcomes

Dysfunctional states over course of disease

Factors affecting clinical judgment

Adequacy of data obtainable at one visit

Value of communication between first and second opinion physicians

Value of second opinion (consultations)

Extent of professional consensus regarding indications for treatment

Adherence to professional consensus

Objective indications for surgery*

Subjective indications for surgery*

Factors affecting perception of health status

Pain due to treatment*

Incapacitation due to treatment*

NOTE: The items used in rating operative procedures and diagnoses on each of the variables in this table are presented in Appendix E, Exhibit E.17.
The operative procedures and diagnoses that were rated are presented in Table B.1.

* Denotes variables given ratings at the level of operative procedures that are also collected at the level of patient cases using survey instruments.

generic ratings so that interrater agreements could be established for the generic ratings. It was gratifying to note that interpanel agreement rates exceeded 85 percent for generic ratings. This in itself gives credence to the measures derived from them.

Before the panels could proceed to the development of procedure-specific ratings, it was necessary that they review the procedure-specific rating form prepared by the staff as the generic panel had done for its form. All five panels approved this form as it stood.

The variables for which procedure-specific measures were developed include the subjective and objective indications for surgery, pretreatment health status as reported by patients and physicians, the data base used by the recommending physicians, measures of the posttreatment health status, perceived changes in the posttreatment status, specific comorbid conditions, and preventable complications that could reduce or negate any health benefits from surgical treatment.

Having described what parameters were to be characterized, the panels' next step was to make a final decision concerning the surgical procedures and the associated clinical conditions for which they would develop procedure-specific ratings. Using the same criteria as used by the staff in arriving at the preliminary selection list, the panels chose the ten surgical procedures listed in Table B.3, for which diagnosis-specific characterizations were developed to correspond to the generic ratings already described.

As with the primary data set, these panel ratings were later used by the staff to develop procedure-specific questions relevant to evaluating health outcome. Question sets for all ten procedures were included in the patient interviews.

Following the same review procedures as for the primary data set, the measures were reviewed and approved by the physician panels.

B.2.1 Factor Analysis

As described in Chapter 4 (Volume II), the ratings data were the subject of a factor analysis in an effort to organize the large number of variables into a smaller number of factors suitable for inclusion in the model of confirmation. The following measures, as defined on the ratings sheet (Exhibit E.17, Appendix E), were included in the factor analysis:

- Evidence for efficacy of surgical procedure (Q.5)
- Objective indications for surgery (Q.6)
- Adequacy of data obtainable at one visit (Q.8A)

Table B.3

ELECTIVE SURGICAL PROCEDURES
AND DIAGNOSES OR CONDITIONS
FOR WHICH SPECIFIC OUTCOME MEASURES
AND INDICATIONS FOR SURGERY WERE DEVELOPED

Operative procedure	Associated diagnosis
Cholecystectomy	Symptomatic gallstones Asymptomatic gallstones
Herniorrhaphy	Inguinal hernia
Hemorrhoidectomy	Combined hemorrhoids
Hysterectomy	Prolapse Myomas Undiagnosed pelvic mass
Cataract surgery	Adult cataract
Adenoidectomy with myringotomy/ tube insertion	Serous otitis media
Tonsillectomy	Chronic tonsillitis Recurrent acute tonsillitis Obstructive hypertrophy of tonsils
Tonsillectomy with adenoidectomy	Recurrent chronic tonsillitis with nasopharyngeal obstruction
Open Prostatectomy	Benign prostatic hypertrophy
Transurethral Prostatectomy	Benign prostatic obstruction Malignant prostatic obstruction Symptomatic non-obstructive "prostatosis"

- Value of communication between first and second opinion physicians (Q.8B)
- Extent of professional consensus regarding indications for treatment (Q.9)
- Adherence to professional consensus (Q.10)
- Value of second opinion (consultations) (Q.11)
- Pain due to surgical treatment (Q.14A)
- Incapacitation due to surgical treatment (Q.14B)

For the following measures, the difference in expected outcome between surgical and medical treatment was computed and included (these variables are labeled MSM18A, MSM18B etc.):

- Rate of serious morbidity (Q.18A)
- Mortality rate (Q.18B)
- Severity of pain (Q.19A)
- Duration of persistence of pain (Q.19B)
- Psychological distress (Q.20)
- Personal activities impairment (Q.21A to Q.21C)

If no medical treatment was possible, then the difference between surgical and no treatment was used. Pretreatment measures were included for Q.19A thru Q.21C; these variables are labeled MQ19APT1, or Q20PT, etc. Finally, a scale was constructed on the expected clinical course of the condition (Q.17), and the difference between surgical and medical treatment computed.

Varimax rotation was performed on the initial principal axis factor pattern; the results are shown in Table B.4. By construction, the factors have mean equal to zero, standard deviation equal to one, and are orthogonal to each other.

B.3 Creation and Assessment of the Measures of Health Status

The measures used to quantify the effects of the second surgical opinion program on participant health were developed from items included on the patient interview instrument. Two types of data were collected for this purpose:

- data on general health and functioning before and after treatment; and
- (from patients proposed for selected procedures) problems likely to be experienced by patients proposed for specific procedures.

Table B.4

FACTOR ANALYSIS OF PHYSICIAN PANEL RATINGS:
VARIMAX ROTATION

ROTATED FACTOR PATTERN

	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6	
MQ5	-0.14775	0.51641	-0.34908	0.14350	-0.32709	-0.39592	MEAN OF Q5
MQ6	-0.26689	0.84539	0.01174	-0.00339	-0.02815	-0.03557	MEAN OF Q6
MQ8B	-0.10790	-0.36810	0.23547	0.18667	0.67599	0.33539	MEAN OF Q8B
MQ9	-0.09820	0.85937	-0.20178	0.07143	-0.05832	-0.19398	MEAN OF Q9
MQ10	0.03057	0.84678	0.02494	-0.12424	-0.19059	-0.08802	MEAN OF Q10
MQ11	0.05225	-0.44794	-0.16017	-0.15081	0.10016	0.76593	MEAN OF Q11
MQ14AST	0.30907	-0.07660	0.13782	0.77005	0.02191	0.10886	MEAN OF Q14AST
MQ14BST	0.53210	0.21042	0.22359	0.37637	0.26526	0.26520	MEAN OF Q14BST
MSM17	-0.01822	0.34145	-0.81126	0.16526	-0.06656	0.01115	MEAN OF SM17
MSM18A	0.15275	-0.27663	0.52083	0.22559	-0.17975	0.47410	MEAN OF SM18A
MSM18B	0.18697	-0.00883	-0.07256	0.16001	-0.01067	0.71514	MEAN OF SM18B
MSM19A1	0.06534	-0.01581	0.20494	-0.84206	0.05892	0.04085	MEAN OF SM19A1
MSM20	0.07436	0.19602	0.52213	0.03320	-0.60000	0.14784	MEAN OF SM20
MSM21A	-0.46584	0.16242	0.06924	-0.17852	0.22250	-0.27228	MEAN OF SM21A
MSM21B1	0.04430	0.08727	0.83915	-0.01930	0.12994	-0.31524	MEAN OF SM21B1
MSM21C	-0.87782	0.13804	-0.01358	-0.13944	-0.04193	0.01684	MEAN OF SM21C
MQ19APT1	0.36319	0.00855	-0.11192	0.76684	-0.19050	0.09726	MEAN OF Q19APT1
MQ20PT	-0.06905	-0.07955	0.10074	-0.41837	0.69256	-0.06792	MEAN OF Q20PT
MQ21APT	0.77991	-0.00982	0.11371	0.19724	-0.20277	0.10693	MEAN OF Q21APT
MQ21BPT1	0.63426	-0.22939	-0.14175	0.18382	-0.04113	0.40946	MEAN OF Q21BPT1
MQ21CPT	0.91728	-0.05848	0.12344	0.01762	0.06327	-0.05007	MEAN OF Q21CPT

ORTHOGONAL TRANSFORMATION MATRIX

	1	2	3	4	5	6
1	0.68471	-0.46805	0.18591	0.32277	0.02767	0.41544
2	0.36686	0.62849	-0.22367	0.47296	-0.42219	-0.13582
3	0.22021	0.22768	0.85731	-0.22060	-0.05715	-0.32971
4	-0.56834	-0.38547	0.39691	0.69888	-0.05390	0.12573
5	-0.14268	-0.32802	0.09128	-0.35841	-0.77411	0.49277
6	-0.12601	0.57097	0.12064	-0.08103	0.45289	0.66455

PROPORTIONAL CONTRIBUTIONS TO COMMON VARIANCES BY ROTATED FACTORS

FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6
3.769601	3.170663	2.329871	2.523301	1.716824	2.114309

The items included in the interviews to obtain data from which to develop the general health measures were largely obtained or derived from measures of health used previously in the literature. It was anticipated that several items would be combined into multiple item measures; after the data were assembled, the correlations between items were examined and items were combined on the basis of high correlations and overlapping conceptual content. In combining items, a consistent convention of recoding and labeling the indexes was followed such that high value would indicate good health. The methods by whic five general health measures were generated from the surgery data, and by which a sixth measure was created from the first five, are detailed in Table B.5.

Procedure-specific measures of health status were developed for selected procedures to be used in validating the general health measures. To the extent that the general health measures could be shown to be correlated with the procedure-specific measures, they would be considered to be usable as proxies for health problems across a variety of clinical conditions.

Such measures were developed for the medical conditions anticipated to be most frequent among the program populations--those for which cholecystectomy, hemorrhoidectomy, tonsillectomy/adenoidectomy, and hysterectomy might be proposed. Panels of experts in the relevant clinical areas identified physical problems that were likely to be experienced by patients wih these medical conditions and likely to be ameliorated by successful treatment. As an example, the survey items used to develop the procedure-specific measures for cholecystectomy are presented in Table B.6. As shown, responses were obtained describing both pretreatment health status and health status following treatment. While the survey contained two separate items dealing with each problem (asking how often it occurred and how severe it was), the responses to these pairs of items were found to be highly correlated and each pair was combined to produce a single measure.

B.3.1 Assessing the Reliability and Validity of the Health Status Measures

Reliable and valid measures of health status were a fundamental requirement of the analysis. Particular attention was paid to the development and properties of the health outcome measures. However, because many items were combined into multiple-item indices, the reliability of these indices had to be verified. In addition, the validity of these measures (that is, the extent to which the general measures of health correlated with measures based on specific medical conditions and procedures) had to be confirmed.

Table B.5

CREATION OF GENERAL HEALTH STATUS MEASURES FROM SURVEY RESPONSES

Health measure	Survey items	Method	Period described by responses
Absence of pain	"How painful is your condition?" "How frequently do you have pain?"	Responses to the items were reversed and averaged. Responses were obtained describing both the pretreatment and posttreatment periods.	Separate responses were obtained describing the pretreatment and posttreatment periods.
Absence of other symptoms	"Are you now bothered by symptoms other than pain because of your medical condition?" "How much were you bothered by these problems?"	Responses to these items were combined to form one scale ranging from "bothered a lot" to "no bother." Responses were obtained describing both the pre treatment and posttreatment periods.	Separate responses were obtained describing the pretreatment and posttreatment periods.
Activities of daily living	"How much does your condition interfere with: - caring for yourself? - walking? - getting around your community? - pursuing hobbies? - performing other usual activities?	Responses to these items were averaged. Responses were obtained describing both the pretreatment and posttreatment periods.	Separate responses were obtained describing the pretreatment and posttreatment periods.
Treatment outcome	"How are you compared to the time when treatment was first considered?" "Compared to other people who have this condition, would you say that your treatment turned out ('very much better' to 'very much worse')? "How satisfied are you with how your treatment turned out?	Responses were recoded and averaged.	Responses described the post treatment period only.
Comparative health	"Compared with people your age, is your health ('poor' to 'excellent')	The response scale was reversed.	Responses described the post treatment period only.
Overall health	- - -	Constructed as the average of the five previous items, rescaled to have comparable ranges.	Values applied to the period described by the constituent data.

Table B.6

SURVEY ITEMS USED TO DEVELOP PROCEDURE-SPECIFIC HEALTH MEASURES FOR CHOLECYSTECTOMY

The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have long periods of pain in the right upper abdomen?

   All of the time
   Most of the time
   Some of the time
   Little of the time
   None of the time (Skip to Question 2)

1a. How severe was this pain in the right upper abdomen?

   Very severe
   Somewhat severe
   Not too severe

2. At that time, how often did you have gastro-intestinal symptoms (such as gas or belching) or short attacks of sharp pain?

   All of the time
   Most of the time
   Some of the time
   Little of the time
   None of the time (Skip to Question 3)

2a. How severe were these attacks of pain?

   Very severe
   Somewhat severe
   Not too severe

3. At that time, how often did you have jaundiced, yellow-colored skin or eyes?

   All of the time
   Most of the time
   Some of the time
   Little of the time
   None of the time (Skip to Question 4)

3a. How serious was this condition of jaundiced, yellow-colored skin or eyes?

   Very serious
   Somewhat serious
   Not too serious

Table B.6 (continued)

The next questions should be answered in terms of how you are at the present time.

4. How often do you now have pain in the right upper abdomen?

All of the time
Most of the time
Some of the time
Little of the time
None of the time (Skip to Question 5)

4a. How severe is this pain in the right upper abdomen?

Very severe
Somewhat severe
Not too severe

5. How often do you now have gastro-intestinal symptoms (such as gas or belching) or short attacks of sharp pain?

All of the time
Most of the time
Some of the time
Little of the time
None of the time (Skip to Question 6)

5a. How severe are these attacks of pain?

Very severe
Somewhat severe
Not too severe

6. How frequently do you now have jaundiced, yellow-colored skin or eyes?

All of the time
Most of the time
Some of the time
Little of the time
None of the time (Go to the end)

6a. How serious is this condition of jaundiced, yellow-colored skin or eyes?

Very serious
Somewhat serious
Not too serious

One aspect of the reliability of a multiple item measure is its interitem agreement or coefficient alpha (Nunnally, 1967), which indicates the extent to which the items overlap in measuring an underlying construct. As shown in Table B.7, the measures are fairly consistent in showing high interitem agreement, with scores of .80 or above in most instances. (The sample sizes for hemorrhoidectomy were not sufficiently large to examine the measures for this procedure separately.) The coefficients within medical conditions approximate those for the total samples, so the indices appear to be reliable within specific medical conditions as well as across a variety of conditions. The coefficients are lowest for the overall health measure; this is not surprising, since the content of this summary measure is more diverse than that of the other measures. The somewhat lower reliability for the overall measure led to the decision not to substitute it for the other measures. Instead, the analysis of program effects on health was performed separately on each of the measures of posttreatment health status as well as on the overall measure.

In order to assess the degree to which the general health status measures reflect outcomes related to specific conditions (and the degree to which they could serve as useful proxies for procedure-specific measures, the correlations between procedure-specific measures and the general health measures were calculated. As an example, Table B.8 presents the data from Massachusetts participants considering cholecystectomy. Although there are variations in the magnitude of the correlations, correlations between procedure-specific and general measures of posttreatment status tend to be highest, and correlations between procedure-specific and general measures before treatment tend to be next highest.

This pattern is expanded in Table B.9, which summarizes the calculations for all other procedure/site combinations, presenting the averages of the values for the individual measures within each category. The resuls are fairly consistent across all six procedure/site combinations. In five of the six cases, correlations between the posttreatment procedure-specific and general measures of health status are higher than the other three correlations; in the remaining case, the correlation between pretreatment measures is highest, and that between posttreatment measures the second highest. Correlations of the magnitude of these averages would be statistically significant in five of the six cases. In general, the second-highest correlations tend to be between the procedure-specific and general health status measures prior to treatment.

From these results, it appears that the measures of general health status do reflect health outcomes associated with specific medical conditions. The correspondence between procedure-specific and general measures of health outcomes is not perfect; the

Table B.7

INTERITEM AGREEMENT (COEFFICIENT ALPHA) FOR GENERAL MEASURES OF PRETREATMENT AND POSTTREATMENT HEALTH

General health status measure	Massachusetts				Connecticut				New York
	Total (n=263)	Chole-cystectomy (n=45)	Tonsil-ectomy (n=108)	Hyster-ectomy (n=95)	Total (n=97)	Cholecys-tectomy (n=26)	Tonsil-lectomy (n=45)	Hyster-ectomy (n=32)	Total (n=243)
Pretreatment									
Absence of pain	.90	.75	.83	.92	.95	.75	.69	.37	.94
Absence of other symptoms	.98	.99	.97	.98	.96	.97	.90	.95	.95
Activities of daily living	.88	.95	.72	.91	.88	.92	.87	.69	.89
Posttreatment									
Absence of pain	.97	.98	.92	.93	.97	.86	.82	.84	.92
Absence of other symptoms	.97	.96	.96	.99	.98	.98	.99	.97	.96
Activities of daily living	.87	.89	.86	.94	.93	.89	.99	.96	.85
Treatment outcome	.74	.79	.82	.86	.83	.81	.80	.80	.85
Overall health[a]	.62	.52	.68	.72	.81	.72	.83	.85	.70

Note: Excludes cases not yet recovered from treatment or with other significant medical conditions.

[a]Overall health is the average of the four preceeding indices plus the single item measure health status.

Table B.8

CORRELATIONS BETWEEN GENERAL HEALTH MEASURES AND PROCEDURE-SPECIFIC MEASURES FOR CHOLECYSTECTOMY

Procedure-specific health measures for cholecystectomy	Pretreatment general health measure			Posttreatment general health measure				
	Absence of pain	Absence of other symptoms	Activities of daily living	Absence of pain	Absence of other symptoms	Activities of daily living	Treatment outcome	Comparative health
Pretreatment								
Absence of pain in upper right abdomen	.25	.11	-.16	.03	-.05	.04	.00	.19
Absence of gastro-intestinal symptoms	.50	.14	.07	-.15	-.13	.05	-.13	.19
Absence of jaundice	.20	.42	.37	.19	.15	.47	-.08	.13
Posttreatment								
Absence of pain in upper right abdomen	-.07	.05	-.10	.63	.25	-.02	.32	.52
Absence of gastro-intestinal symptoms	-.06	.24	.22	.70	.31	.43	.18	.07
Absence of jaundice	.11	.35	.17	.54	-.01	.62	.23	.42

Note: The data are for Massachusetts CPES sample participants who considered cholecystecomy (n = 45).

Table B.9

AVERAGE CORRELATIONS BETWEEN GENERAL HEALTH MEASURES AND PROCEDURE-SPECIFIC HEALTH MEASURES PRE- AND POSTTREATMENT

Procedure-specific health measures	Massachusetts		Connecticut	
	Pretreatment general measures (3)	Posttreatment general measures (5)	Pretreatment general measures (3)	Posttreatment General measures (6)
Cholecystectomy				
Pretreatment measures (3)	.21	.06	.17	.03
Posttreatment measures (3)	.09	.34	.08	.24
Tonsillectomy and adenoidectomy				
Pretreatment measures (6)	.19	.07	.17	-.03
Posttreatment measures (6)	.04	.32	.01	.42
Hysterectomy				
Pretreatment measures (9)	.38	.09	.35	.22
Posttreatment measures (9)	.09	.31	.23	.42

Notes: (1) The cell entries are the arithmetic means of the correlations observed between individual measures within each category of measures. The numbers in parentheses are the number of measures within the category.

(2) Correlations are based on sample sizes ranging from 26 to 109.

measures do, of course, address somewhat differing content. However, there is sufficient relationship to indicate that the general health measures developed can serve as valid proxies for the procedure-specific measures of health status for purposes of the analysis of second opinion program effects on health outcomes. The results also support the differential validity of the measures because respondents provided different responses concerning pretreatment and posttreatment status with little relationship between measures of health status prior to treatment and health status following treatment.

Appendix C

NEW YORK MEDICARE DEMONSTRATION: THE COST-EFFECTIVENESS OF ALTERNATIVE PUBLICITY EFFORTS

Appendix C

NEW YORK MEDICARE DEMONSTRATION: THE COST-EFFECTIVENESS OF ALTERNATIVE PUBLICITY EFFORTS

This appendix analyzes three of the main publicity campaigns conducted by the New York Medicare demonstration program, estimating their effects on program utilization and the cost-per-second opinion generated. The nature and timing of the publicity efforts are described in Volume II, Section 4.2.6.

C.1 Effects on Utilization

The three main publicity methods used by the New York Medicare demonstrations were newspaper advertisements, brochures, and bill stuffers. Analysis of program participants' reports of how they heard about the program compared to the timing of the use of each method provides rough estimates of the net effect of each method on program utilization.

Data for the period through December 1980 indicate that 565 participants reported learning about the program through the newspaper; a few of these might have been from news stories about second opinion programs, but the patterns in Volume II, Figure 4.1 make it seem likely that most were the result of the newspaper advertisements. There were 10 ads during the period covered by the data; thus, each advertisement, on average, generated 56 second opinions.

It is more difficult to derive accurate estimates of the effects of the brochures and bill stuffers on second opinion utilization, because these two sources were not coded separately. Despite sustained efforts to estimate an econometric model to disentangle the effects of the brochures, the NSSOP bill stuffers, and the Medicare demonstration bill stuffers, it was not possible to construct a model that produced reasonable estimates of the effects. An alternative, if somewhat simplistic, allocation can be made using the following rules:

- Assume that all participants who reported having learned about the program through brochures between May 1978 and June 1979 heard about it as a result of the brochures that were sent out near the beginning of the program.

- Assume that all participants who reported having learned about the program through brochures between June 1979 and January 1980 learned about it from the NSSOP bill stuffers.

- Assume that all participants who reported having learned about the program through 'brochures' after February 1980 learned about it from the Medicare demonstration bill stuffers.

These allocation rules result in the estimate that the 650,000 demonstration brochures created 806 second opinions, or 124 second opinions per 100,000 brochures; the NSSOP campaign created 385 second opinions; and the 2 million demonstration bill stuffers created 1,162 second opinions, or 55 per 100,000 bill stuffers. The effects of the NSSOP are probably overestimated, but otherwise these are reasonable estimates of the order of magnitude of the effects.

The relative cost-effectiveness of newspaper advertisements, brochures, and Medicare demonstration bill stuffers is shown in Table C.1. Newspaper advertisements are clearly a poor investment. The brochures are more effective on a per unit basis than the bill stuffers; given the amount of uncertainty in the per unit effect, it is possible that they might be worth the extra printing cost. However, even if the estimates of the effects are far off the mark, it is clear that the extra postage they require is not worth the price. The bill stuffers are clearly the most efficient outreach method, generating program referrals at a cost per case that is only 1 to 4 percent of that of the other methods.

Table C.1

THE NEW YORK MEDICARE DEMONSTRATION

COST AND RESULTS OF PROGRAM PUBLICITY EFFORTS:
MAY 1978–DECEMBER 1980

Publicity effort	Second opinions generated	Cost	Cost/second opinion
10 newspaper advertisements	565	$181,000	$320.00
650,000 brochures	806	$84,500[a]	$105.00
2 million bill stuffers	1,162	$5,200[b]	$4.50

Source: Cost figures from New York Medicare demonstration program staff.

[a]Includes printing costs of approximately 1.4 cents each, and postage of 15 cents.

[b]Includes only the printing cost of 0.25 cents each; because these were included with other mailings, no postage cost was incurred.

Appendix D

A GAME-THEORETIC MODEL OF PATIENT SURGICAL DECISIONMAKING: IMPLICATIONS FOR SECOND SURGICAL OPINION PROGRAMS

Appendix D

A GAME-THEORETIC MODEL OF PATIENT SURGICAL DECISIONMAKING: IMPLICATIONS FOR SECOND SURGICAL OPINION PROGRAMS

This appendix attempts to address the potential for second opinion programs to improve patient decisionmaking concerning surgery, and to result in improved patient health. It postulates a game-theoretic model of patient decisionmaking and then examines three alternative strategies that patients might adopt.

D.1 Model

The model used in this investigation is based on the following conceptualization:

(i) For each patient, there exists a correct action either to have surgery (S) or not to have surgery (-S).

(ii) Each physician that the patient visits either recommends surgery (R) or does not recommended surgery (-R).

(iii) The patient either undergoes the surgery under consideration (U) or does not undergo the surgery (-U).

(iv) The patient's decision is either correct (C) or is not correct (-C).

The following notation is used:

(i) Let R_i denote that the i^{th} physician recommended surgery and $-R_i$ denote that the ith physician did not.

(ii) Let $q^S = P(S)$ (i.e., the probability that the correct action for the patient is to have surgery).

(iii) Let $p_S^i = P(R_i|S)$ (i.e., the probability that the i^{th} physician recommends surgery if the correct action for the patient is to have surgery) and, hence, $1-p_S^i = P(-R_i|S)$.

(iv) Let $p_{-S}^i = P(-R_i|-S)$ (i.e., the probability that the i^{th} physician does not recommend surgery if the correct action for the patient is not to have surgery) and, hence, $1 - P_{-S}^i = P(R_i|-S)$.

For the purpose of this investigation, two strong assumptions are made:

(i) opinions rendered by different physicians are mutually independent, and

(ii) $p_S = p_S^i$ and $p_{-S} = p_{-S}^i$ for all i.

Implicit in the first is the assumption that the physicians of a patient do not communicate with one another (or, if they do, that the opinions rendered are independent of the communication).

Clearly this is not typical in a traditional medical consultation. By the second assumption, it is supposed that the first, second, and third opinion physicians are equally likely to make a correct recommendation both in the case that the patient should undergo surgery and in the case that the patient should not undergo surgery.

Three strategies that a patient could adopt to decide whether or not to undergo surgery are examined:

(i) One-opinion strategy:	Obtain only one opinion and follow it.
(ii) Two-opinion strategy:	Obtain a second opinion, but never a third opinion, follow concurring opinions, and choose randomly between differing opinions.
(iii) Three-opinion strategy:	Obtain a second opinion, obtain a third opinion whenever the first and second opinions differ, and follow the majority opinion.

Note that with each of these strategies, the decision is based entirely on the opinions obtained from physicians--the model does not take into account patient judgment regarding the appropriateness of surgery. These strategies are not intended to represent the reality of current patient decisionmaking. Rather, our purpose is to elucidate the relative advantages of alternative strategies. Patients might then be encouraged to adopt the more advantageous strategies.

In the next sections, each of these strategies is examined.

D.1.1 One-Opinion Strategy

There are four mutually exclusive and exhaustive cases in the one-opinion strategy, as displayed in the rows of Table D.1.

The first row, for example, denotes the case in which the patient should have surgery and the first opinion physician recommends surgery. Using the one-opinion strategy, the patient follows the first physician's recommendation and undergoes surgery. In this case, the decision is the correct one. The probability of this case is, of course, $q_S p_S$.

Summing the probabilities of cases resulting in correct decisions, one finds the probability of making a correct decision with this strategy to be given by

Table D.1

ONE-OPINION STRATEGY

Correct action	First opinion	Decision	Correctness of decision	Probability
S	RI	U	C	$q_S p_S$
S	$-R_1$	-U	-C	$q_S(1-p_S)$
S	R_1	U	-C	$(1-q_S)(1-p_{-S})$
-S	-RI	-U	C	$(1-q_S)p_{-S}$

$$P_1(C) = q_S p_S + (1-q_S)p_{-S}.$$

Since second opinion programs often focus on those who have been recommended for surgery, it is also of interest to calculate the probability of a correct decision among patients whose first physician specifically recommends surgery. One finds this probability to be given by:

$$P_1(C|R_1) = \frac{q_S p_S}{q_S p_S + (1-q_S)(1-p_{-S})}.$$

D.1.2 Two-Opinion Strategy

There are 12 mutually exclusive and exhaustive cases in the two-opinion strategy, as listed in Table D.2. For this strategy, one finds the probability of making a correct decision to be given by

$$\begin{aligned} P_2(C) &= q_S p_S^2 + 2[(1/2)q_S p_S(1-p_S)] + 2[(1/2)(1-q_S)p_{-S}(1-p_{-S})] + (1-q_S)p_{-S}^2 \\ &= q_S p_S + (1-q_S)p_{-S}, \end{aligned}$$

precisely equal to the probability for the one-opinion strategy. The probability of making a correct decision among those recommended for surgery by their first physician is found to be given by

$$P_2(C|R_1) = \frac{(1/2)q_S p_S(1+p_S) + (1/2)(1-q_S)(1-p_{-S})p_{-S}}{q_S p_S + (1-q_S)(1-p_{-S})}.$$

D.1.3 Three-Opinion Strategy

There are also 12 cases in the three-opinion strategy, as shown in Table D.3. Here, however, the probability of making a correct decision is given by

$$P_3(C) = q_S p_S^2(3-2p_S) + (1-q_S)p_{-S}^2(3-2p_{-S}).$$

Among cases recommended for surgery by the first physician, the probability of a correct decision is given by

$$P_3(C|R_1) = \frac{q_S p_S^2(2-p_S) + (1-q_S)p_{-S}^2(1-p_{-S})}{q_S p_S + (1-q_S)(1-p_{-S})}.$$

Table D.2

TWO-OPINION STRATEGY

Correct action	First opinion	Second opinion	Decision	Correctness of decision	Probability
S	R_1	R_2	U	C	$q_S p_S^2$
S	R_1	$-R_2$	U	C	$(\frac{1}{2})q_S p_S(1-p_S)$
S	R_1	$-R_2$	-U	-C	$(\frac{1}{2})q_S p_S(1-p_S)$
S	$-R_1$	R_2	U	C	$(\frac{1}{2})q_S p_S(1-p_S)$
S	$-R_1$	R_2	-U	-C	$(\frac{1}{2})q_S p_S(1-p_S)$
S	$-R_1$	$-R_2$	-U	-C	$q_S(1-p_S)^2$
-S	R_1	R_2	U	-C	$(1-q_S)(1-p_{-S})^2$
-S	R_1	$-R_2$	U	-C	$(\frac{1}{2})(1-q_S)p_{-S}(1-p_{-S})$
-S	R_1	$-R_2$	-U	C	$(\frac{1}{2})(1-q_S)p_{-S}(1-p_{-S})$
-S	$-R_1$	R_2	U	-C	$(\frac{1}{2})(1-q_S)p_{-S}(1-p_{-S})$
-S	$-R_1$	R_2	-U	C	$(\frac{1}{2})(1-q_S)p_{-S}(1-p_{-S})$
-S	$-R_1$	$-R_2$	-U	C	$(1-q_S)p_{-S}^2$

Table D.3

TWO-OPINION STRATEGY

Correct action	First opinion	Second opinion	Third Opinion	Decision	Correctness of decision	Probability
S	R_1	R_2	-	U	C	$q_S p_S^2$
S	R_1	$-R_2$	R_3	U	C	$q_S p_S^2 (1-p_S)$
S	R_1	$-R_2$	$-R_3$	-U	-C	$q_S p_S (1-p_S)^2$
S	$-R_1$	R_2	R_3	U	C	$q_S p_S^2 (1-p_S)$
S	$-R_1$	R_2	$-R_3$	-U	-C	$q_S p_S (1-p_S)^2$
S	$-R_1$	$-R_2$	-	-U	-C	$q_S (1-p_S)^2$
-S	R_1	R_2	-	U	-C	$(1-q_S)(1-p_{-S})^2$
-S	R_1	$-R_2$	R_3	U	-C	$(1-q_S)p_{-S}(1-p_{-S})^2$
-S	R_1	$-R_2$	$-R_3$	-U	C	$(1-q_S)p_{-S}^2(1-p_{-S})$
-S	$-R_1$	R_2	R_3	U	-C	$(1-q_S)p_{-S}(1-p_{-S})^2$
-S	$-R_1$	R_2	$-R_3$	-U	C	$(1-q_S)p_{-S}^2(1-p_{-S})$
-S	$-R_1$	$-R_2$	-	-U	C	$(1-q_S)p_{-S}^2$

D.2 Comparison of Strategies

Let us now compare the probabilities of making a correct decision under the three strategies. We have already seen that $P_1(C) = P_2(C)$ so that, under this model, there is no advantage to obtaining a second opinion if one never obtains a third opinion. However, when we compare $P_1(C)$ with $P_3(C)$ we find that, so long as $1/2<p_S<1$ and $1/2<p_{-S}<1$ the probability of making a correct decision is higher with the three-opinion strategy.

This follows from the fact that

$$p_S^2(3-2p_S) > p_S \text{ if } 1/2 < p_S < 1,$$

and, similarly,

$$p_{-S}^2(3-2p_{-S}) > p_{-S} \text{ if } 1/2 < p_{-S} < 1.$$

Thus, with $1/2<p_S<1$ and $1/2<p_{-S}<1$,

$$q_S p_S^2(3-2p_S) > q_S p_S \text{ and } (1-q_S)p_{-S}^2(3-2p_S) > (1-q_S)p_{-S}.$$

Hence, $q_S p_S^2(3-2p_S) + (1-q_S)p_{-S}^2(3-2p_S) > q_S p_S + (1-q_S)p_{-S}$, , and

$$P_3(C) > P_1(C).$$

The extent of the difference between $P_3(C)$ and $P_1(C)$ is of interest, since it measures the increased frequency with which a correct decision is made with the three-opinion strategy. Since the answer depends upon the unknown value q_S unless $p_S = p_{-S}$, we assume for this purpose only that $p_{-S} = p_{-S}$, that is, that the physician's probability of making a correct recommendation does not depend upon whether the correct recommendation is for or against surgery. Under this assumption, we find the results shown in Table D.4. With p_S and p_{-S} equal to .5 (and similarly with p_S and $p_{-S} = 1.0$), one finds there is no difference in the probability of making a correct decision. In the one instance, no information is provided by any opinion so there is nothing to be gained by obtaining a second or third opinion. In the other, the first opinion provides perfect information, so again there is nothing to be gained by obtaining additional opinions.

Table D.4

COMPARISON OF STRATEGIES

$p_S (=p_{-S})$	$P_1(C)$	$P_3(C)$	$P_3(C) - P_1(C)$
.50	.500	.500	.000
.55	.550	.575	.025
.60	.600	.648	.048
.65	.650	.718	.068
.70	.700	.784	.084
.75	.750	.844	.094
.80	.800	.896	.096
.85	.850	.939	.089
.90	.900	.972	.072
.95	.950	.993	.043
1.00	1.000	1.000	.000

However, with intermediate values of p_S and p_{-S}, the probability of making a correct decision with the three-opinion strategy exceeds the probability with the one-opinion strategy. If p_S and p_{-S} are equal to .80, the probability of making a correct decision is 9.6 percentage points higher with the three-opinion strategy.

Since second opinion programs often focus on patients recommended for surgery, it would also be of interest to compare $P_1(C|R_1)$, $P_2(C|R_1)$, and $P_3(C/R_1)$. Unfortunately, the ranking of these quantities depends in a complex manner on the unknown parameters q_S, p_S, and p_{-S}.

D.3 Conclusion

The results obtained suggest two insights regarding second opinion programs. First, they suggest the importance of third opinions when the first and second opinion differ. Without the third opinion, the potential patient health benefit of such programs may be lost. Secondly, the results suggest that if second opinion programs are able to persuade patients considering surgery to obtain (independent) second opinions and, whenever the first and second differ, to obtain a third opinion, such programs may indeed improve patient decisionmaking concerning surgery and result in improved patient health outcomes.

However, several caveats are in order. First, the results obtained are based on assumptions of independent physician opinions, no patient judgment regarding the appropriateness of surgery, and equal probabilities of correct recommendation for all opinions. The effects of weakening these assumptions still needs to be investigated. Also, the results are based on comparison of the unconditional probabilities of a correct decision. Since second opinion programs typically focus on patients recommended for surgery, comparisons should also be made of the probabilities of a correct decision among patients whose first physician has recommended surgery, perhaps using estimated values for one or more of the unknown parameters.

Appendix E

EXHIBITS

Exhibit E.1

MASSACHUSETTS CPES PROGRAM RECORD SAMPLE

Intake Form Abstract

PILGRIM FOUNDATION — INTAKE FORM ABSTRACT

CARD 1/1=1

Foundation code __0__3/2-3

Patient code __ __ __ __ __ __/4-9 /10=1

Referral date (date signed by coordinator) __ __/ __ __/ __ __/11-16
m d y

Date of birth __ __/ __ __/ __ __/17-22
m d y

Sex/23 m___ f___ na___
=1 =2 =9

Zip code __ __ __ __ __/24-28

Telephone number __ __ __ - __ __ __ - __ __ __ __/29-38

Primary diagnosis _____

Diagnosis codes __ __ __ __ __ __/39-44 __ __ __ __ __ __/45-50

Secondary diagnosis _____

Secondary diagnosis __ __ __ __ __ __/51-56 __ __ __ __ __ __/57-62

Proposed surgical procedure _____

ICD procedure code __ __ __ __ __/63-67 Medicaid procedure code __ __ __ __/68-71

Proposed hospital _____ Hospital code __ __ __ __ __ __/72-77

/78-80 BLANK// CARD 2/DUP 1-9, 10=2

Physician code __ __ __ __ __ __/11-16

Form checked appropriately, no further action ___/17=1

Enter codes for criteria checked __ __ __/18-20 __ __ __/21-23 __ __ __/24-26

__ __ __/27-29 __ __ __/30-32 __ __ __/33-35 __ __ __/36-38 __ __ __/39-41

OR: Second opinion deemed necessary ___/42=1

Date proposing physician notified __ __/ __ __/ __ __/43-48 (date of letter)
m d y

Date patient notified __ __/ __ __/ __ __/49-54 (date of appointment letter)
m d y

Date Foundation notified __ __/ __ __/ __ __/55-60 (date form received--on front)
m d y

CONSULTANT DATA

Physician code __ __ __ __ __ __/61-66

Date consult scheduled __ __/ __ __/ __ __/67-72
m d y

Date of actual consultation __ __/ __ __/ __ __/73-78
m d y

/79-80 BLANK// CARD 3/DUP 1-9, 10=3

Amount billed /11 $12___/ $20___/ $30___/
=1 =2 =3

Results of consultation: APPROVED ___/ NOT APPROVED ___/ NEVER SHOW ___/
12=1 13=1 14=1

Date proposing physician notified __ __/ __ __/ __ __/15-20
m d y

Date patient notified __ __/ __ __/ __ __/21-26
m d y

Date hospital notified __ __/ __ __/ __ __/27-32
m d y

SECOND CONSULTANT DATA

Physician code __ __ __ __ __ __/33-38

Date consult scheduled __ __/ __ __/ __ __/39-44
m d y

Date of actual consultation __ __/ __ __/ __ __/45-50
m d y

Amount billed /51 $12 ___/ $20 ___/ $30 ___/
=1 =2 =3

Results of consultation: APPROVED ___/ NOT APPROVED ___/ NEVER SHOW ___/
52=1 53=1 54=1

Date proposing physician notified __ __/ __ __/ __ __/55-60
m d y

Date patient notified __ __/ __ __/ __ __/61-66
m d y

Date hospital notified __ __/ __ __/ __ __/67-72
m d y

OUTCOME

Special consideration--medical necessity ____/73=1

Special consideration--travel hardship ____/74=1

Special consideration--other specify ____/75=1 _____/76-77

Cancelled out of program ____/78=1

Reason for cancellation _____/79-80

CARD 4/ DUP 1-9, 10=4

Date of completion of program (last date in file) __ __/ __ __/ __ __/11-16
m d y

Abstractor code ___/17

Batch code ___ ___/18-19

/20-80 BLANK

Exhibit E.2

Bay State Health Care Foundation Consultant Report Abstract

card 1/1=2 1. Foundation Code/ 2=1

2. Patient Zip Code: _ _ _ _ _ /3-7

3. Patient Code: _ _ _ _ _ _/8-13 3a. Proposing physician documentation received ___ YES ___ NO ___ na /15-25
/14=1 /14=2 /14=9 BLANK

4. Recommended Procedure:_____

Procedure Code:_ _ _ _ _ _ /26-31 _ _ _ _ _ _ /32-37 _ _ _ _ _ _/38-43

5. Consultant Recommendation for Surgery: /___/Yes /___/No
44=1 45=1

6. Alternative Procedure Recommended (if applicable):_____

_____

Procedure Code: _ _ _ _ _ _/46-51 _ _ _ _ _ _ /52-57 _ _ _ _ _ _ /58-63

7. Diagnostic Tests Performed: Code

_____ __ __ __/64-66

_____ __ __ __/67-69

_____ __ __ __/70-72

_____ __ __ __/73-75

_____/76-78//79=blank,80=1/card 2 - dup 1-13,skip 14-26,

_____ __ __ __/27-29

_____ __ __ __/30-32

_____ __ __ __/33-35

8. Final Diagnosis(es): _____

Diagnosis Code(s):_ _ _ _ _ _/36-41 _ _ _ _ _ _/42-47 _ _ _ _ _ _/48-53

9. Reason for Non-confirmation:

/__/ No treatment necessary 54=1

/__/ No pathology found 55=1

/__/ A trial of medical management 56=1 is indicated

- /__/ Medication 57=1
- /__/ PT 58=1
- /__/ Diet therapy 59-1
- /__/ Other_____ 60=1

/__/ Complicating concurrent condition 61=1

_____/62

/__/ Reevaluation indicated 63=1

/__/ Further diagnostic studies indicated 64=1

/__/ Other 65=1

_____/66

note here if "pain" is mentioned

10. Date of Consultation:__ __/__ __ /__ __/ 11. Consultant code _ _ _ _ _ _/73-78
Mo. Day Year /67-72

Abstractor: _____ Code: _/79 //80=2
ST 44/A-21

Exhibit E.3

Abt Associates Inc.
55 Wheeler Street
Cambridge, MA 02138

OMB Number: 09380149
Approval Expires: December 1982

A STUDY OF THE IMPACT OF SECOND OPINIONS FOR ELECTIVE SURGERY

MEDICAID BENEFICIARY TELEPHONE SURVEY (CONNECTICUT)

Label:	1-8 / 9-10/01 Final Status Code: _____ 11-12/ Date of Final Status: ____/____/____ 13-18/

Label:	Respondent Name _____ Parent/Guardian's Name (if applicable) _____

Label Beneficiary's New Address:

Street _____

City/state _____

Zip code _____

Telephone No. (203) _____

OMB Number: 09380149
Approval Expires: December, 1982

MEDICAID BENEFICIARY TELEPHONE SURVEY (CONNECTICUT)
MAIN QUESTIONNAIRE

ID # _____ 1-8/

ASK QUESTIONS 1 AND 2 FOR EACH OPERATION PERFORMED.

		OPERATION #1	OPERATION #2	OPERATION #3
		9-10/	9-10/	9-10/
1.	May I have the name and age of the person who had the (OPERATION)?	Name: _____ Age: ___ yrs. 11-12/	Name: _____ Age: ___ yrs. 11-12/	Name: _____ Age: ___ yrs. 11-12/
	RECORD SEX, PROBE IF UNKNOWN:	Sex: M . . . 1 F . . . 2 13/	Sex: M . . . 1 F . . . 2 13/	Sex: M . . . 1 F . . . 2 13/
		OPERATION (SPECIFY CODE #) _____ 14-18/	OPERATION (SPECIFY CODE #) _____ 14-18/	OPERATION (SPECIFY CODE #) _____ 14-18/
		19-24/BLANK	19-24/BLANK	19-24/BLANK
2.	In what month and year did (PERSON) have this operation?	____/____ MO. YR. 25-28/	____/____ MO. YR. 25-28/	____/____ MO. YR. 25-28/
		29-33/BLANK	29-33/BLANK	29-33/BLANK
		34-35/11	34-35/12	34-35/13

IF ONE OR MORE OPERATIONS RECOMMENDED IN Q. 2 - COL. B ON CONTROL CARD, CONTINUE WITH Q. 3; OTHERWISE SKIP TO CLOSING.

ASK QUESTIONS 3 AND 4 FOR EACH OPERATION RECOMMENDED.

		OPERATION #4	OPERATION #5	OPERATION #6
		9-10/	9-10/	9-10/
3.	May I have the name and age of the person for whom the (OPERATION) was recommended?	Name: _____ Age: ___ yrs. 11-12/	Name: _____ Age: ___ yrs. 11-12/	Name: _____ Age: ___ yrs. 11-12/
	RECORD SEX, PROBE IF UNKNOWN:	Sex: M . . . 1 F . . . 2 13/	Sex: M . . . 1 F . . . 2 13/	Sex: M . . . 1 F . . . 2 13/
		OPERATION (SPECIFY CODE #) _____ 14-18/	OPERATION (SPECIFY CODE #) _____ 14-18/	OPERATION (SPECIFY CODE #) _____ 14-18/
		19-28/BLANK	19-28/BLANK	19-28/BLANK
4.	In what month was surgery most recently discussed with (PERSON'S) doctors?	____/____ MO. YR. 29-32/	____/____ MO. YR. 29-32/	____/____ MO. YR. 29-32/
		33/BLANK	33/BLANK	33/BLANK
		34-35/04	34-35/05	34-35/06

Exhibit E.4

EVALUATION OF SECOND SURGICAL OPINION PROGRAMS 10/28/81

Patient interview survey data transfer sheet - MASSACHUSETTS - Bay State

LEFT JUSTIFY ALL NAMES AND ADDRESSES; RIGHT JUSTIFY AGE AND ALL DATES

1) SURVEY ID#: ___ 3 5 1 ___ ___ ___ ___ 1 1 1-10/

2) PATIENT'S FIRST NAME _ 11-25/

3) LAST NAME _ 26-40/

4) AGE ___ ___ 41-42// 43-48 BLK// 5) SEX ___ (M or F) 49/

6) TELEPHONE NUMBER (___ ___ ___) ___ ___ ___ - ___ ___ ___ ___ 50-59/

7) notes about phone, language: _____ 60-62 BLK

8) PROGRAM STATUS | PC complete ___/6 (enter 2 in 1st digit of ID)| or | PC cancel ___/7 (enter 3 in 1st digit of ID)| 63/

9) PROCEDURE ___ (1 to 9) see card for codes 64/

from followup calls

10) SURGERY DISPOSITION ___ ___ ___ (REC or HAD) 65-67/

11) BASELINE DATE ___ ___ / ___ ___ 68-71/ (80/1)

month year

12) PATIENT'S ADDRESS:(be sure to include apt.#s , other useful info) 11-35/

_ _

13) CITY: _ 36-55/

14) STATE M A 56-57// 15) ZIP ___ ___ ___ ___ ___ 58-62/

16) FIELD SERVICE CODE 5 (coded at AAI) 63/ (80/2)

17) RESPONDENT'S FIRST NAME _ 11-25/

18) LAST NAME _ 26-40/

19) RELATIONSHIP TO PATIENT: _____

20) CONDITION _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

OMB NO: 09380149

Approval Expires: December, 1983

A STUDY OF THE IMPACT OF SECOND OPINIONS FOR ELECTIVE SURGERY

Patient Personal Interview

IDENTIFICATION NUMBER: | | | | | | | | | | | 1-10/

SECOND SURGICAL OPINION
PROGRAM EVALUATION

CONTROL CARD

PATIENT
PERSONAL
INTERVIEW

Conducted by Abt Associates Inc.
55 Wheeler Street, Cambridge, MA 02138
(617) 492-7100

1-10/
11-12/10
Respondent type: 13-26/BLANK
27/

New York Demonstration 1
New York Comparison. 2
Medicaid Comparison (Connecticut). 3
Massachusetts Desk Audit 4
Massachusetts Desk Audit Dropout 5
Massachusetts Personal Consultation. 6
Massachusetts Personal Consultation Dropout 7

Respondent's Relationship to Patient _____

FINAL STATUS

Complete. 01	Language Barrier. 06
Partial/Breakoff. . . . 02	Moved Out of Area 07
Refused 03	Final No Contact. 08
R. Deceased 04	Non-working Telephone # . 09
R. Institutionalized. . 05	Final Other 10

28-29/

CALL RECORD

	DATE	TIME	INITIALS	PERSONAL (P) OR TEL. (T)	RESULT OF ATTEMPT
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

According to our information, you were considering having (a OPERATION/surgery to treat CONDITION). I'd like to start by listing the doctors you have seen about this condition.

1. Please tell me the name of the first doctor you talked to about surgery to treat your condition since (BASELINE MONTH). (RECORD NAME IN FIRST DOCTOR COLUMN OF GRID. IF NAME UNKNOWN, PROBE FOR SPECIALTY AND/OR LOCATION.)

2. What was the date of your last visit to (DOCTOR IN Q.1) before you first saw any other doctor about your condition? (RECORD MONTH AND YEAR IN FIRST DOCTOR COLUMN. IF NO OTHER DOCTOR SEEN, RECORD DATE OF LAST VISIT BEFORE SURGERY, IF ANY.)

3. During that visit did (DOCTOR IN Q.1) recommend surgery to treat your condition, discourage you from having surgery at that time, or just discuss surgery without either recommending or discouraging it? (CODE ONE RESPONSE IN FIRST DOCTOR COLUMN. IF FIRST DOCTOR IS ONLY DOCTOR SEEN SINCE BASELINE MONTH, SKIP TO Q.9. IF ANOTHER DOCTOR SEEN, ASK Q.4.)

4. Who was the next doctor you saw about your condition after (LAST DOCTOR MENTIONED)? Please do not include any specialists you were sent to by one of your doctors to get additional tests or an examination, the results of which would be sent back to your doctor to help him evaluate your case. (RECORD NAME OF NEXT DOCTOR IN GRID. IF NAME UNKNOWN, PROBE FOR SPECIALTY AND/OR LOCATION.)

5. What was the date of your last visit to (DOCTOR IN Q.4) before you first saw another doctor about your condition? (RECORD MONTH AND YEAR IN GRID. IF NO DOCTORS SEEN AFTER DOCTOR IN Q.4, RECORD MONTH AND YEAR OF LAST VISIT FOR CONDITION BEFORE SURGERY.)

6. During that visit did (DOCTOR IN Q.4) recommend surgery to treat your condition, discourage you from having surgery at that time, just discuss surgery without either recommending or discouraging it, or not discuss surgery at all as a treatment? (CODE ONE RESPONSE UNDER APPROPRIATE DOCTOR IN GRID.)

7. Were you sent to (DOCTOR IN Q.4) by some other doctor you had seen, or did you go to him/her on your own? (RECORD RESPONSE UNDER APPROPRIATE DOCTOR IN GRID.)

8. Did you go to (DOCTOR IN Q.4) because he/she was a surgeon you might want to perform the operation, because he/she was a doctor or surgeon you were seeking another opinion from about the most appropriate treatment for your condition, or for some other reason? (IF RESPONDENT WAS SEEKING ANOTHER OPINION, CODE YES IN GRID. IF NOT, CODE NO.)

   AFTER Q.8, ASK: Did you see another doctor about your condition after (LAST DOCTOR MENTIONED)? IF YES, REPEAT QUESTIONS 4-8 FOR NEXT DOCTOR. IF NO, ASK Q.9.

9. What was the date of the very first visit in which you discussed having surgery for your condition with a doctor? (RECORD DATE IN GRID. IF DON'T KNOW, PROBE FOR AN ESTIMATE. CONTINUE ON MAIN QUESTIONNAIRE.)

RECORDING GRID

Q.1/Q.4	1st DOCTOR	2nd DOCTOR	3rd DOCTOR	4th DOCTOR
DOCTOR'S NAME OR SPECIALTY/LOCATION				
Q.2/Q.5 REFERENCE MONTH	____/____ MONTH YEAR 30-33	____/____ MONTH YEAR 34-37	____/____ MONTH YEAR 38-41	____/____ MONTH YEAR 42-45
Q.3/Q.6				
Recommended surgery	1 46/	1 47/	1 48/	1 49/
Discouraged surgery	2	2	2	2
Just discussed surgery	3	3	3	3
Didn't mention surgery	N.A.	4	4	4
Q.7				
Sent by other doctor	N.A.	1 50/	1 51/	1 52/
Went on own	N.A.	2	2	2
Q.8				
Seeking another opinion	N.A.	1 53/	1 54/	1 55/
Not seeking an opinion	N.A.	2	2	2

Q.9

FIRST DISCUSSION OF SURGERY ____/____ MONTH YEAR 56-59/

NON-INTERVIEW REPORT

Instructions: Complete this form for all assigned interviews you were unable to complete.

Type of Contact: Telephone . 1 Personal . 2

Date of Report: _____/_____/_____
Month Day Year

_____
Interviewer's Signature

1. Why were you unable to complete this interview?

Refusal (Answer 2,3,5,7).....1
Partial/ Breakoff (Answer 3,5,7)..2
Moved out of Area (Answer 7).....3
No contact (Answer 7).....4
Temporarily ill or
Unavailable (Answer 4,5,7).....5
Language barrier (Answer 6,7).....6
Institutionalized (Answer 4,5,7)..7
Deceased.....8
Other (Answer 4,5,7).....9

2. If Refused: Did the respondent refuse to be interviewed or did someone else refuse?
Respondent refused.....1
Someone else (Specify)_____
_____ 2

3. If Refused or Broke Off:
A. What was the reason given? (Record Verbatim)

B. What other important circumstances help explain the reason for breakoff or refusal?

4. If Ill/Unavailable/Institutionalized or Other: Describe details.

5. If Refused, Broke Off, Unavailable, or Other:

Do you think we can complete this interview?
Yes.....1
No.....2

6. If Language Barrier:
What language does the respondent speak?
_____

7. Recommended Action:

CARD 01
11-12/01

START TIME:_____ 13-16/
AM. 1
PM. 2 17/

* SECTION I -- FIRST DOCTOR *

Now I'd like to discuss your (1st REFERENCE MONTH) visit to (FIRST DOCTOR).

1. Exactly what did (FIRST DOCTOR) say the problem was, that is, what was (his/her) diagnosis in (1st REFERENCE MONTH)? (RECORD DIAGNOSIS OR, IF UNKNOWN, DESCRIBE CONDITION.)

18-22/

---

2. Can you tell me the name of the operation you and (FIRST DOCTOR) talked about in (1st REFERENCE MONTH)? (IF NEEDED, PROBE: Can you describe the operation? What part of the body did it involve?)

23-26/

---

3. Is (FIRST DOCTOR) a surgeon who could perform the operation him/herself?

YES 1

NO 2 27/

BEFORE READING Q. 4, CODE BELOW FIRST DOCTOR'S RECOMMENDATION RESPONSE FROM CONTROL CARD.

4. When you visited (FIRST DOCTOR) in (1st REFERENCE MONTH), you said that (he/she)...(READ CIRCLED RESPONSE ONLY.)

Recommended surgery to treat your (CONDITION) (ASK A)	1	28/
Discouraged you from having surgery at that time (ASK B)	2	
Discussed surgery without either recommending or discouraging it (SKIP TO Q. 5)	3	

IF RECOMMENDED SURGERY, ASK A:

A. When did (he/she) say you should have the operation? (READ LIST AND CODE ONE RESPONSE.)

As soon as possible	1	29/
Within one month	2	
Within three months	3	
Within six months	4	
Within twelve months	5	
THE DOCTOR DIDN'T SAY WHEN.	6	

CARD 01

IF DISCOURAGED SURGERY, ASK B:

B. Why did (FIRST DOCTOR) discourage surgery at that time to treat your (CONDITION)? Was it primarily because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

HAND CARD

(He/She) didn't think you actually had (CONDITION)	01	30-31/
(He/She) thought you had (CONDITION), but it wasn't bad enough then for you to have an operation	02	
(He/She) thought that you should try other kinds of treatment before you decided to have an operation	03	
(He/She) thought that because of other health problems you shouldn't have an operation	04	
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one at some time in the future.	05	
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION).	06	
Some other reason (SPECIFY) _____ _____	07	
THE DOCTOR DIDN'T SAY WHY	08	

5. In terms of your overall well-being, did (FIRST DOCTOR) indicate that you would be (READ LIST) if you had the operation to treat your (CONDITION)? (CODE ONE RESPONSE.)

Much better off	1	32/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

CARD 01

6. During the (1st REFERENCE MONTH) visit, did you and (FIRST DOCTOR) talk about any other kinds of treatment <u>besides</u> surgery, such as medicines, medical equipment, or diet therapy?

YES (ASK A & B)	1	33/
NO (ASK C)	2	

<u>IF YES, ASK A & B:</u>

A. What other kinds of treatment did you talk about? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINE OR DRUGS	1	34/
PHYSICAL THERAPY	2	35/
MEDICAL EQUIPMENT OR APPLIANCES (SUCH AS A TRUSS, EYEGLASSES, PESSARY, BRACES, OR PROSTHESIS)	3	36/
DIET THERAPY	4	37/
CHEMICAL/RADIATION THERAPY	1	38/
OTHER TREATMENT (SPECIFY)_____ _____	2	39/ 40/

B. At that time, and in terms of your overall well-being, did (FIRST DOCTOR) indicate that you would be (READ LIST) if you had (TREATMENT(S) CODED YES IN Q.6A)? (CODE ONE RESPONSE.)

Much better off (SKIP TO Q. 7)	1	41/
Somewhat better off (SKIP TO Q. 7).	2	
Unchanged (SKIP TO Q. 7).	3	
Somewhat worse off, or (SKIP TO Q. 7) . . .	4	
Much worse off (SKIP TO Q. 7)	5	
DID NOT INDICATE (SKIP TO Q. 7)	6	

<u>IF NO, ASK C:</u>

C. At that time, and in terms of your overall well-being, did (FIRST DOCTOR) indicate that you would be (READ LIST) if your (CONDITION) was <u>not</u> treated at all? (CODE ONE RESPONSE.)

Much better off	1	42/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off.	5	
DID NOT INDICATE	6	

CARD 01

Now, I'd like to ask you some questions about your (CONDITION).

7. How long had you been bothered by (CONDITION) before seeing (FIRST DOCTOR) in (1st REFERENCE MONTH)? (ENTER NUMBER NEXT TO APPROPRIATE TIME PERIOD.)

# WEEKS	_____	43-44/
# MONTHS	_____	45-46/
# YEARS	_____	47-48/

---

8. How painful was your (CONDITION) when you saw (FIRST DOCTOR) in (1st REFERENCE MONTH)? Would you say it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very painful	1	49/
Moderately painful	2	
Mildly painful, or	3	
Not painful at all (SKIP TO Q. 10)	4	

---

9. At that time, how frequently did you have pain? (READ LIST AND CODE ONE RESPONSE.)

A little of the time.	1	50/
Some of the time.	2	
Most of the time, or.	3	
All of the time	4	

---

10. Other than pain, were you bothered by any symptoms -- that is, health or medical problems -- because of your (CONDITION)? When we say symptoms other than pain, we mean, for instance, blurred vision associated with cataracts or bleeding accompanying hemorrhoids.

YES	1	51/
NO (SKIP TO Q. 11)	2	
DON'T KNOW (SKIP TO Q. 11)	8	

IF YES, ASK A:

A. Altogether, how much would you say you were bothered by these symptoms? Were you bothered . . . (READ LIST AND CODE ONE RESPONSE.)

A lot	1	52/
Some	2	
A little, or	3	
Not very much at all	4	

CARD 01

11. I'd like to know how much your (CONDITION) interfered with your normal activities, at that time. As I read each activity, please tell me whether your condition caused a lot of interference, some interference, a little interference, or no interference in performing it.

	A LOT	SOME	A LITTLE	NO INTER-FERENCE	NOT APPLIC-ABLE	
Caring for yourself such as eating, bathing, dressing, going to the bathroom.	1	2	3	4	5	53/
Walking and moving around inside the house.	1	2	3	4	5	54/
Getting around your community -- driving, riding the bus, and walking	1	2	3	4	5	55/
Pursuing hobbies, sports, or recreation	1	2	3	4	5	56/
Performing other usual activities: a job, housework, going to school.	1	2	3	4	5	57/

Now I would like to ask you a few questions about how you felt after your visit in (1st REFERENCE MONTH) to (FIRST DOCTOR).

12. After talking with (FIRST DOCTOR) in (1st REFERENCE MONTH), did you think that you would have surgery to treat your condition in the near future?

YES.	1	58/
NO	2	

---

13. How certain were you at that time that this would be the best choice? (READ LIST AND CODE ONE RESPONSE.)

Very certain	1	59/
Fairly certain	2	
Fairly uncertain, or	3	
Very uncertain	4	

CARD 01

14. How strongly did you agree with (FIRST DOCTOR's) diagnosis at that time? Would you say you . . . (READ LIST AND CODE ONE RESPONSE.)

Agreed strongly (SKIP TO Q. 15)	1	60/
Agreed somewhat (SKIP TO Q. 15)	2	
Disagreed somewhat, or	3	
Disagreed strongly	4	
DON'T KNOW (SKIP TO Q. 15)	8	

IF DISAGREED SOMEWHAT OR STRONGLY, ASK A:

A. What was the main reason you disagreed? (PROBE FOR ONE RESPONSE.) 61-62/

---

15. Since your (1st REFERENCE MONTH) discussion with (FIRST DOCTOR) about surgery, have you had an operation for your (CONDITION)?

YES	1	63/
NO	2	

CARD 01

* SECTION II -- SECOND DOCTOR *

64-65/Blank

QUESTION 16 OMITTED

(REFER TO CONTROL CARD. IF NO SECOND DOCTOR, SKIP TO SECTION V ON PAGE 40. IF THERE IS A SECOND DOCTOR AND HE/SHE WAS SEEN FOR A SECOND OPINION, CONTINUE WITH Q. 17. IF SECOND DOCTOR WAS NOT SEEN FOR AN OPINION, SKIP TO Q. 34 ON PAGE 13.)

SECOND OPINION QUESTIONS

Now I'd like to ask you a few questions about what you were thinking just before you first saw (SECOND DOCTOR).

17. Just before your first visit to (SECOND DOCTOR) how concerned or worried were you about your (CONDITION)? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very concerned	1	66/
Somewhat concerned	2	
A little concerned, or	3	
Not concerned at all	4	

---

18. Before you first saw (SECOND DOCTOR) how much risk did you believe was associated with the operation for your (CONDITION)? Did you believe there was . . . (READ LIST AND CODE ONE RESPONSE.)

A great deal of risk	1	67/
A moderate amount of risk	2	
A small amount of risk, or	3	
No risk at all	4	

CARD 01

19. How thorough an examination of your (CONDITION) did you feel you had obtained before you saw (SECOND DOCTOR)? Did you think it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very thorough	1	68/
Somewhat thorough	2	
Not too thorough, or	3	
Not thorough at all	4	

---

20. How well informed did you feel you were about the operation before you saw (SECOND DOCTOR)? Did you feel you were . . . (READ LIST AND CODE ONE RESPONSE.)

Fully informed.	1	69/
Somewhat informed, or	2	
Not very well informed.	3	

---

21. How adequate was the amount of time the doctor before (SECOND DOCTOR) spent discussing treatments other than surgery? Would you have said it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very adequate	1	70/
Somewhat adequate	2	
Not too adequate, or	3	
Not adequate at all	4	

---

22. Just before you first saw (SECOND DOCTOR), what were your expectations in terms of your overall well-being if you <u>had</u> the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	71/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

CARD 01-02

23. Just before you first saw (SECOND DOCTOR), what were your expectations in terms of your overall well-being if you did not have the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	72/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

24. Did the doctor you saw before (SECOND DOCTOR), suggest you see another doctor for an independent second opinion before deciding about surgery -- not counting any doctors (he/she/they) specifically sent you to?

YES	1	73/
NO.	2	

---

25. Before you saw (SECOND DOCTOR), had any friends or family members suggested that you see another doctor for a second opinion before deciding about surgery?

YES	1	74/
NO.	2	

---

26. Before you saw (SECOND DOCTOR), had you seen or heard about any newspaper or magazine articles saying one should get a second opinion?

YES	1	75/
NO.	2	

CARD 02
11-12/02

27. Before you saw (SECOND DOCTOR), had you seen or heard any radio or television announcements saying one should get a second opinion?

YES	1	
NO.	2	13/

---

28. At that time, did you think the doctor you had already seen might be offended if you got a second opinion?

YES	1	14/
NO.	2	

CARD 02

29. Where did you get (SECOND DOCTOR'S) name? (DO NOT READ LIST. CODE ONE RESPONSE.)

BLUE CROSS/BLUE SHIELD OR MEDICARE.	01	15-16/
MEDICAID (SKIP TO Q.34)	02	
A FRIEND OR RELATIVE (SKIP TO Q.33)	03	
A MEDICAL SOCIETY (SKIP TO Q.33)	04	
A PHARMACIST (SKIP TO Q.33)	05	
A DOCTOR (OBTAIN NAME AND SKIP TO Q.33)____		
_____	06	
OTHER (SPECIFY AND SKIP TO Q.33)_____		
_____	07	

30. Where did you get (Blue Cross-Blue Shield's/Medicare's) telephone number? (DO NOT READ LIST. CODE ONE RESPONSE.)

PHONE BOOK/DIRECTORY ASSISTANCE	01	17-18/
A DOCTOR	02	
FRIEND OR RELATIVE	03	
INSURANCE AGENT	04	
BROCHURE OR PAMPHLET FROM MEDICARE	05	
TELEVISION ANNOUNCEMENT	06	
RADIO ANNOUNCEMENT	07	
NEWSPAPER ADVERTISEMENT	08	
NEWSPAPER ARTICLE	09	
MAGAZINE ADVERTISEMENT.	10	
MAGAZINE ARTICLE	11	
TOLL FREE "800" NUMBER	12	
MEDICARE OFFICE	13	
OTHER (SPECIFY) _____		
_____	14	
_____		

CARD 02

31. In general, how satisfied were you with the process of getting the names of one or more doctors to see for a second surgical opinion? Would you say you were . . .(READ LIST AND CODE ONE RESPONSE.)

Very satisfied (SKIP TO Q. 32)	1	19/
Somewhat satisfied (SKIP TO Q. 32)	2	
Somewhat dissatisfied, or	3	
Very dissatisfied	4	

IF SOMEWHAT OR VERY DISSATISFIED, ASK A:

A. What was the main reason you were dissatisfied with the process? (PROBE FOR ONE RESPONSE.)

20-21/

---

32. How likely do you think you would have been to obtain a second surgical opinion if there were no program like the one you called? Do you think you . . .(READ LIST AND CODE ONE RESPONSE.)

Definitely would have	1	22/
Probably would have	2	
Probably would not have, or	3	
Definitely would not have obtained a second opinion	4	

SKIP TO Q. 34.

---

33. At the time you were considering surgery, had you heard of any second surgical opinion programs?

YES	1	23/
NO (SKIP TO Q. 34)	2	

IF YES, ASK A:

A. Why did you decide not to use this program? (PROBE FOR ONE RESPONSE.)

24-25/

CARD 02

Now, I'd like to discuss what occurred in your (2nd REFERENCE MONTH) visit to (SECOND DOCTOR).

34. Exactly what did (SECOND DOCTOR) say the problem was, that is, what was his/her diagnosis at the time of your (2nd REFERENCE MONTH) visit? (RECORD DIAGNOSIS OR, IF UNKNOWN, DESCRIBE CONDITION.) 26-30/

(REFER TO CONTROL CARD. IF SECOND DOCTOR DID NOT DISCUSS SURGERY, SKIP TO Q. 39.)

35. Was the operation you and (SECOND DOCTOR) talked about in (2nd REFERENCE MONTH) the same operation that you and (FIRST DOCTOR) discussed in (1st REFERENCE MONTH)?

YES (SKIP TO Q. 36)	1	31/
NO	2	

IF NO, ASK A:

A. What operation did you talk about with (SECOND DOCTOR)?

_____ 32-35/
NAME OF OPERATION

---

36. Is (SECOND DOCTOR) a surgeon who could perform the operation him/herself?

YES	1	36/
NO.	2	

(BEFORE ASKING Q. 37, CODE SECOND DOCTOR'S RECOMMENDATION FROM CONTROL CARD.)

37. When you visited (SECOND DOCTOR) in (2nd REFERENCE MONTH), you said that (he/she) . . . (READ CIRCLED RESPONSE ONLY.)

Recommended surgery to treat your (CONDITION) (ASK A)	1	37/
Discouraged you from having surgery at that time (ASK B)	2	
Discussed surgery without either recommending or discouraging it (SKIP TO Q. 38)	3	

IF RECOMMENDED SURGERY, ASK A:

A. When did (he/she) say you should have the operation? (READ LIST AND CODE ONE RESPONSE.)

As soon as possible	1	38/
Within one month	2	
Within three months	3	
Within six months	4	
Within twelve months	5	
THE DOCTOR DIDN'T SAY WHEN	6	

IF DISCOURAGED SURGERY, ASK B:

B. Why did (SECOND DOCTOR) discourage surgery at that time to treat your (CONDITION)? Was it primarily because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

HAND CARD	(He/She) didn't think you actually had (CONDITION).	01	39-40/
	(He/She) thought you had (CONDITION), but it wasn't bad enough then for you to have an operation.	02	
	(He/She) thought that you should try other kinds of treatment before you decided to have an operation	03	
	(He/She) thought that because of other health problems you shouldn't have an operation	04	
	(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one at some time in the future	05	
	(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)	06	
	Some other reason (SPECIFY) _____ _____	07	
	THE DOCTOR DIDN'T SAY WHY	08	

CARD 02

38. In terms of your overall well-being, did (SECOND DOCTOR) indicate that you would be (READ LIST) if you had the operation to treat your (CONDITION)? (CODE ONE RESPONSE.)

Much better off.	1	41/
Somewhat better off.	2	
Unchanged.	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

---

39. During the (2nd REFERENCE MONTH) visit, did you and (SECOND DOCTOR) talk about any other kinds of treatment instead of surgery, such as medicines, medical equipment or diet therapy?

YES (ASK A & B).	1	42/
NO (ASK C)	2	

IF YES, ASK A & B:

A. What other kinds of treatment did you talk about? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINE OR DRUGS.	1	43/
PHYSICAL THERAPY	2	44/
MEDICAL EQUIPMENT OR APPLIANCES (SUCH AS A TRUSS, EYEGLASSES, PESSARY, BRACES, OR PROSTHESIS)	3	45/
DIET THERAPY	4	46/
CHEMICAL/RADIATION THERAPY	1	47/
OTHER TREATMENT (SPECIFY)_____ _____	2	48/ 49/

B. At that time, and in terms of your overall well-being, did (SECOND DOCTOR) indicate that you would be (READ LIST) if you had (TREATMENT(S) CODED YES IN Q. 39A.)? (CODE ONE RESPONSE.)

Much better off (SKIP TO Q. 40)	1	50/
Somewhat better off (SKIP TO Q. 40)	2	
Unchanged (SKIP TO Q. 40)	3	
Somewhat worse off, or (SKIP TO Q. 40). . .	4	
Much worse off (SKIP TO Q. 40).	5	
DID NOT INDICATE (SKIP TO Q. 40).	6	

IF NO, ASK C:

C. At that time, and in terms of your overall well-being, did (SECOND DOCTOR) indicate that you would be (READ LIST) if your (CONDITION) was not treated at all? (CODE ONE RESPONSE.)

Much better off	1	51/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off.	5	
DID NOT INDICATE.	6	

Now I would like to ask you a few questions about how you felt after your (2nd REFERENCE MONTH) visit with (SECOND DOCTOR).

40. After talking with (SECOND DOCTOR) in (2nd REFERENCE MONTH) did you think that you would have surgery to treat your condition in the near future?

YES	1	52/
NO.	2	

---

41. How certain were you at that time that this would be the best choice? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very certain	1	53/
Fairly certain	2	
Fairly uncertain, or	3	
Very uncertain	4	

---

42. How strongly did you agree with (SECOND DOCTOR's) diagnosis at that time? Would you say you . . . (READ LIST AND CODE ONE RESPONSE.)

Agreed strongly (SKIP TO Q. 43)	1	54/
Agreed somewhat (SKIP TO Q. 43)	2	
Disagreed somewhat, or	3	
Disagreed strongly	4	
DON'T KNOW (SKIP TO Q. 43)	8	

IF DISAGREED SOMEWHAT OR STRONGLY, ASK A:

A. What was the main reason you disagreed? (PROBE FOR ONE RESPONSE.) 55-56/

CARD 02

IF SECOND DOCTOR SEEN FOR A SECOND OPINION, ASK Q's. 43-45. OTHERWISE, SKIP TO Q. 47.

43. In what way did the second opinion you obtained influence your final decision about surgery? (PROBE FOR ONE RESPONSE.)

57-58/

---

44. If you had not obtained a second opinion, do you think that you . . . (READ LIST AND CODE ONE RESPONSE.)

Definitely would have made the same decision	1	59/
Probably would have made the same decision	2	
Probably would not have made the same decision, or	3	
Definitely would not have made the same decision	4	

---

45. Did you give (SECOND DOCTOR) permission to tell (FIRST DOCTOR) about your visit with (him/her)?

YES (SKIP TO Q. 47)	1	60/
NO	2	

IF NO, ASK A:

A. What was the main reason you did not give permission? Was it because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

You felt the (SECOND DOCTOR) would be more objective if he or she had no contact with (FIRST DOCTOR)	1	61/
You thought (FIRST DOCTOR) would think your getting a second opinion was a waste of time and money	2	
You thought (FIRST DOCTOR) would be offended if he knew you got a second opinion	3	
(SECOND DOCTOR) did not ask for permission to speak to (FIRST DOCTOR), or	4	
Any other reason (SPECIFY) _____ _____	5	62/
PROGRAM DOESN'T ALLOW COMMUNICATION	6	

CARD 02

63-64/Blank

* SECTION III -- THIRD DOCTOR *

QUESTION 46 OMITTED

(REFER TO CONTROL CARD. IF NO THIRD DOCTOR SKIP TO SECTION V ON PAGE 40. IF THERE IS A THIRD DOCTOR AND HE/SHE WAS THE FIRST DOCTOR SEEN FOR ANOTHER OPINION, CONTINUE WITH Q. 47. IF THE THIRD DOCTOR WAS NOT THE FIRST DOCTOR SEEN FOR ANOTHER OPINION, SKIP TO Q. 64 ON PAGE 23.)

SECOND OPINION QUESTIONS

Now I'd like to ask you a few questions about what you were thinking just before you first saw (THIRD DOCTOR).

47. Just before your first visit to (THIRD DOCTOR) how concerned or worried were you about your (CONDITION)? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very concerned	1	65/
Somewhat concerned	2	
A little concerned, or	3	
Not concerned at all	4	

CARD 02

48. Before you first saw (THIRD DOCTOR) how much risk did you believe was associated with the operation for your (CONDITION)? Did you believe there was . . . (READ LIST AND CODE ONE RESPONSE.)

A great deal of risk	1	66/
A moderate amount of risk	2	
A small amount of risk, or	3	
No risk at all	4	

---

49. How thorough an examination of your (CONDITION) did you feel you had obtained before you saw (THIRD DOCTOR)? Did you think it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very thorough	1	67/
Somewhat thorough	2	
Not too thorough, or	3	
Not thorough at all	4	

---

50. How well informed did you feel you were about the operation before you saw (THIRD DOCTOR)? Did you feel you were . . . (READ LIST AND CODE ONE RESPONSE.)

Fully informed	1	68/
Somewhat informed, or	2	
Not very well informed	3	

---

51. How adequate was the amount of time the doctor(s) before (THIRD DOCTOR) spent discussing treatments other than surgery? Would you have said it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very adequate	1	69/
Somewhat adequate	2	
Not too adequate, or	3	
Not adequate at all	4	

CARD 02

52. Just before you first saw (THIRD DOCTOR), what were your expectations in terms of your overall well-being if you had the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	70/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

53. Just before you first saw (THIRD DOCTOR), what were your expectations in terms of your overall well-being if you did not have the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	71/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

54. Did any doctor you saw before (THIRD DOCTOR), suggest you see another doctor for an independent second opinion before deciding about surgery -- not counting any doctors (he/she/they) specifically sent you to?

YES	1	72/
NO.	2	

---

55. Before you saw (THIRD DOCTOR), had any friends or family members suggested that you see another doctor for a second opinion before deciding about surgery?

YES	1	73/
NO.	2	

CARD 02-03

56. Before you saw (THIRD DOCTOR), had you seen or heard about any newspaper or magazine articles saying one should get a second opinion?

YES	1	74/
NO.	2	

---

57. Before you saw (THIRD DOCTOR), had you seen or heard any radio or television announcements saying one should get a second opinion?

YES	1	75/
NO.	2	

CARD 03
11-12/03

58. At that time, did you think (any of) the doctor(s) you had already seen might be offended if you got a second opinion?

YES	1	13/
NO.	2	

---

59. Where did you get (THIRD DOCTOR'S) name? (DO NOT READ LIST. CODE ONE RESPONSE.)

BLUE CROSS/BLUE SHIELD OR MEDICARE.	01	14-15/
MEDICAID (SKIP TO Q. 64)	02	
A FRIEND OR RELATIVE (SKIP TO Q.63)	03	
A MEDICAL SOCIETY (SKIP TO Q.63)	04	
A PHARMACIST (SKIP TO Q.63)	05	
A DOCTOR (OBTAIN NAME AND SKIP TO Q.63) _____	06	
OTHER (SPECIFY AND SKIP TO Q.63) _____	07	

CARD 03

60. Where did you get (Blue Cross-Blue Shield's/Medicare's) telephone number? (DO NOT READ LIST. CODE ONE RESPONSE.)

PHONE BOOK/DIRECTORY ASSISTANCE	01	16-17/
A DOCTOR	02	
FRIEND OR RELATIVE	03	
INSURANCE AGENT	04	
BROCHURE OR PAMPHLET FROM MEDICARE	05	
TELEVISION ANNOUNCEMENT	06	
RADIO ANNOUNCEMENT	07	
NEWSPAPER ADVERTISEMENT	08	
NEWSPAPER ARTICLE	09	
MAGAZINE ADVERTISEMENT	10	
MAGAZINE ARTICLE	11	
TOLL FREE "800" NUMBER	12	
MEDICARE OFFICE	13	
OTHER (SPECIFY) _____		
_____		
_____	14	

---

61. In general, how satisfied were you with the process of getting the names of one or more doctors to see for a second surgical opinion? Would you say you were . . .(READ LIST AND CODE ONE RESPONSE.)

Very satisfied (SKIP TO Q. 62)	1	18/
Somewhat satisfied (SKIP TO Q. 62)	2	
Somewhat dissatisfied, or	3	
Very dissatisfied	4	

IF SOMEWHAT OR VERY DISSATISFIED, ASK A:

A. What was the main reason you were dissatisfied with the process? (PROBE FOR ONE RESPONSE.) 19-20/

CARD 03

62. How likely do you think you would have been to obtain a second surgical opinion if there were no program like the one you called? Do you think you . . .(READ LIST AND CODE ONE RESPONSE.)

Definitely would have	1	21/
Probably would have	2	
Probably would not have, or	3	
Definitely would not have obtained a second opinion	4	

SKIP TO Q. 64

---

63. At the time you were considering surgery, had you heard of any second surgical opinion programs?

YES	1	22/
NO (SKIP TO Q.64)	2	

IF YES, ASK A:

A. Why did you decide not to use this program? (PROBE FOR ONE RESPONSE.)

23-24/

Now, I'd like to discuss what occurred in your (3rd REFERENCE MONTH) visit to (THIRD DOCTOR).

64. Exactly what did (THIRD DOCTOR) say the problem was, that is, what was his/her diagnosis at the time of your (3rd REFERENCE MONTH) visit? (RECORD DIAGNOSIS OR, IF UNKNOWN, DESCRIBE CONDITION.) 25-29/

(REFER TO CONTROL CARD. IF THIRD DOCTOR DID NOT DISCUSS SURGERY, SKIP TO Q. 69.)

65. Was the operation you and (THIRD DOCTOR) talked about in (3rd REFERENCE MONTH) the same operation that you and (FIRST DOCTOR) discussed in (1st REFERENCE MONTH)?

YES (SKIP TO Q. 66)	1	30/
NO	2	

IF NO, ASK A:

A. What operation did you talk about with (THIRD DOCTOR)?

_____ 31-34/

NAME OF OPERATION

CARD 03

66. Is (THIRD DOCTOR) a surgeon who could perform the operation him/herself?

YES	1	35/
NO.	2	

(BEFORE ASKING Q. 67, CODE THIRD DOCTOR'S RECOMMENDATION FROM CONTROL CARD.)

67. When you visited (THIRD DOCTOR) in (3rd REFERENCE MONTH), you said that (he/she) . . (READ CIRCLED RESPONSE ONLY.)

Recommended surgery to treat your (CONDITION) (ASK A)	1	36/
Discouraged you from having surgery at that time (ASK B) . . .	2	
Discussed surgery without either recommending or discouraging it (SKIP TO Q. 68)	3	

IF RECOMMENDED SURGERY, ASK A:

A. When did (he/she) say you should have the operation? (READ LIST AND CODE ONE RESPONSE.)

As soon as possible	1	37/
Within one month	2	
Within three months	3	
Within six months	4	
Within twelve months	5	
THE DOCTOR DIDN'T SAY WHEN	6	

CARD 03

IF DISCOURAGED SURGERY, ASK B:

B. Why did (THIRD DOCTOR) discourage surgery at that time to treat your (CONDITION)? Was it primarily because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

HAND CARD

(He/She) didn't think you actually had (CONDITION)	01	38-39/
(He/She) thought you had (CONDITION), but it wasn't bad enough then for you to have an operation.	02	
(He/She) thought that you should try other kinds of treatment before you decided to have an operation	03	
(He/She) thought that because of other health problems you shouldn't have an operation	04	
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one at some time in the future	05	
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)	06	
Some other reason (SPECIFY)_____ _____	07	
THE DOCTOR DIDN'T SAY WHY	08	

68. In terms of your overall well-being, did (THIRD DOCTOR) indicate that you would be (READ LIST) if you had the operation to treat your (CONDITION)? (CODE ONE RESPONSE.)

Much better off.	1	40/
Somewhat better off.	2	
Unchanged.	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

CARD 03

69. During the (3rd REFERENCE MONTH) visit, did you and (THIRD DOCTOR) talk about any other kinds of treatment instead of surgery, such as medicines, medical equipment or diet therapy?

YES (ASK A & B)	1	41/
NO (ASK C)	2	

IF YES, ASK A & B:

A. What other kinds of treatment did you talk about? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINE OR DRUGS.	1	42/
PHYSICAL THERAPY	2	43/
MEDICAL EQUIPMENT OR APPLIANCES (SUCH AS A TRUSS, EYEGLASSES, PESSARY, BRACES, OR PROSTHESIS)	3	44/
DIET THERAPY	4	45/
CHEMICAL/RADIATION THERAPY	1	46/
OTHER TREATMENT (SPECIFY)_____		
_____	2	47/ 48/

B. At that time, and in terms of your overall well-being, did (THIRD DOCTOR) indicate that you would be (READ LIST) if you had (TREATMENT(S) CODED YES IN Q. 69A.)? (CODE ONE RESPONSE.)

Much better off (SKIP TO Q. 70)	1	49/
Somewhat better off (SKIP TO Q. 70)	2	
Unchanged (SKIP TO Q. 70)	3	
Somewhat worse off, or (SKIP TO Q. 70). . .	4	
Much worse off (SKIP TO Q. 70).	5	
DID NOT INDICATE (SKIP TO Q. 70).	6	

IF NO, ASK C:

C. At that time, and in terms of your overall well-being, did (THIRD DOCTOR) say that you would be (READ LIST) if your (CONDITION) was <u>not</u> treated at all? (CODE ONE RESPONSE.)

Much better off	1	50/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

CARD 03

Now I would like to ask you a few questions about how you felt after your (3rd REFERENCE MONTH) visit with (THIRD DOCTOR).

70. After talking with (THIRD DOCTOR) in (3rd REFERENCE MONTH) did you think that you would have surgery to treat your condition in the near future?

YES	1	51/
NO.	2	

---

71. How certain were you at that time that this would be the best choice? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very certain	1	52/
Fairly certain	2	
Fairly uncertain, or	3	
Very uncertain	4	

---

72. How strongly did you agree with (THIRD DOCTOR's) diagnosis at that time? Would you say you . . . (READ LIST AND CODE ONE RESPONSE.)

Agreed strongly (SKIP TO Q. 73)	1	53/
Agreed somewhat (SKIP TO Q. 73)	2	
Disagreed somewhat, or	3	
Disagreed strongly	4	
DON'T KNOW (SKIP TO Q. 73)	8	

IF DISAGREED SOMEWHAT OR STRONGLY, ASK A:

A. What was the main reason you disagreed? (PROBE FOR ONE RESPONSE.)

54-55/

IF THIRD DOCTOR SEEN FOR A SECOND OPINION, ASK Q's. 73-75. OTHERWISE, SKIP TO Q. 77.

73. In what way did the second opinion you obtained influence your final decision about surgery? (PROBE FOR ONE RESPONSE.)

56-57/

CARD 03

74. If you had not obtained a second opinion, do you think that you . . . (READ LIST AND CODE ONE RESPONSE.)

Definitely would have made the same decision	1	58/
Probably would have made the same decision	2	
Probably would not have made the same decision, or	3	
Definitely would not have made the same decision	4	

---

75. Did you give (THIRD DOCTOR) permission to tell (FIRST DOCTOR) about your visit with (him/her)?

YES (SKIP TO Q. 77)	1	59/
NO	2	

IF NO, ASK A:

A. What was the main reason you did not give permission? Was it because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

You felt (THIRD DOCTOR) would be more objective if he or she had no contact with (FIRST DOCTOR)	1	60/
You thought (FIRST DOCTOR) would think your getting a second opinion was a waste of time and money	2	
You thought (FIRST DOCTOR) would be offended if he knew you got a second opinion	3	
(THIRD DOCTOR) did not ask for permission to speak to (FIRST DOCTOR), or	4	
Any other reason (SPECIFY)_____ _____	5	61/
PROGRAM DOESN'T ALLOW COMMUNICATION	6	

CARD 03

* SECTION IV -- FOURTH DOCTOR *

62-63/Blank

QUESTION 76 OMITTED

(REFER TO CONTROL CARD. IF NO FOURTH DOCTOR, SKIP TO SECTION V ON PAGE 40. IF THERE IS A FOURTH DOCTOR AND HE/SHE WAS THE FIRST DOCTOR SEEN FOR ANOTHER OPINION, CONTINUE WITH Q. 77. IF THE FOURTH DOCTOR WAS NOT THE FIRST DOCTOR SEEN FOR ANOTHER OPINION, SKIP TO Q. 94 ON PAGE 34.)

SECOND OPINION QUESTIONS

Now I'd like to ask you a few questions about what you were thinking just before you first saw (FOURTH DOCTOR).

77. Just before your first visit to (FOURTH DOCTOR) how concerned or worried were you about your (CONDITION)? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very concerned	1	64/
Somewhat concerned	2	
A little concerned, or	3	
Not concerned at all	4	

CARD 03

78. Before you first saw (FOURTH DOCTOR) how much risk did you believe was associated with the operation for your (CONDITION)? Did you believe there was . . . (READ LIST AND CODE ONE RESPONSE.)

A great deal of risk	1	65/
A moderate amount of risk	2	
A small amount of risk, or	3	
No risk at all	4	

---

79. How thorough an examination of your (CONDITION) did you feel you had obtained before you saw (FOURTH DOCTOR)? Did you think it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very thorough	1	66/
Somewhat thorough	2	
Not too thorough, or	3	
Not thorough at all	4	

---

80. How well informed did you feel you were about the operation before you saw (FOURTH DOCTOR)? Did you feel you were . . . (READ LIST AND CODE ONE RESPONSE.)

Fully informed.	1	67/
Somewhat informed, or	2	
Not very well informed.	3	

---

81. How adequate was the amount of time the doctor(s) before (FOURTH DOCTOR) spent discussing treatments other than surgery? Would you have said it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very adequate	1	68/
Somewhat adequate	2	
Not too adequate, or	3	
Not adequate at all	4	

CARD 03

82. Just before you first saw (FOURTH DOCTOR), what were your expectations in terms of your overall well-being if you had the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	69/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

83. Just before you first saw (FOURTH DOCTOR), what were your expectations in terms of your overall well-being if you did not have the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	70/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

84. Did any doctor you saw before (FOURTH DOCTOR), suggest you see another doctor for an independent second opinion before deciding about surgery -- not counting any doctors (he/she/they) specifically sent you to?

YES	1	71/
NO.	2	

---

85. Before you saw (FOURTH DOCTOR), had any friends or family members suggested that you see another doctor for a second opinion before deciding about surgery?

YES	1	72/
NO.	2	

CARD 03-04

86. Before you saw (FOURTH DOCTOR), had you seen or heard about any newspaper or magazine articles saying one should get a second opinion?

YES	1	73/
NO.	2	

---

87. Before you saw (FOURTH DOCTOR), had you seen or heard any radio or television announcements saying one should get a second opinion?

YES	1	74/
NO.	2	

---

88. At that time, did you think (any of) the doctor(s) you had already seen might be offended if you got a second opinion?

YES	1	75/
NO.	2	

CARD 04
11-12/04

89. Where did you get (FOURTH DOCTOR'S) name? (DO NOT READ LIST. CODE ONE RESPONSE.)

BLUE CROSS/BLUE SHIELD OR MEDICARE.	01	13-14/
MEDICAID (SKIP TO Q.94)	02	
A FRIEND OR RELATIVE (SKIP TO Q.93)	03	
A MEDICAL SOCIETY (SKIP TO Q.93)	04	
A PHARMACIST (SKIP TO Q.93)	05	
A DOCTOR (OBTAIN NAME AND SKIP TO Q.93) _____	06	
OTHER (SPECIFY AND SKIP TO Q.93) _____	07	

CARD 04

90. Where did you get (Blue Cross-Blue Shield's/Medicare's) telephone number? (DO NOT READ LIST. CODE ONE RESPONSE.)

PHONE BOOK/DIRECTORY ASSISTANCE	01	15-16/
A DOCTOR	02	
FRIEND OR RELATIVE	03	
INSURANCE AGENT	04	
BROCHURE OR PAMPHLET FROM MEDICARE	05	
TELEVISION ANNOUNCEMENT	06	
RADIO ANNOUNCEMENT	07	
NEWSPAPER ADVERTISEMENT	08	
NEWSPAPER ARTICLE	09	
MAGAZINE ADVERTISEMENT	10	
MAGAZINE ARTICLE	11	
TOLL FREE "800" NUMBER	12	
MEDICARE OFFICE	13	
OTHER (SPECIFY) _____		
_____		
_____	14	

91. In general, how satisfied were you with the process of getting the names of one or more doctors to see for a second surgical opinion? Would you say you were . . .(READ LIST AND CODE ONE RESPONSE.)

Very satisfied (SKIP TO Q. 92)	1	17/
Somewhat satisfied (SKIP TO Q. 92)	2	
Somewhat dissatisfied, or	3	
Very dissatisfied	4	

IF SOMEWHAT OR VERY DISSATISFIED, ASK A:

A. What was the main reason you were dissatisfied with the process? (PROBE FOR ONE RESPONSE.)

18-19/

92. How likely do you think you would have been to obtain a second surgical opinion if there were no program like the one you called? Do you think you . . .(READ LIST AND CODE ONE RESPONSE.)

Definitely would have	1	20/
Probably would have	2	
Probably would not have, or	3	
Definitely would not have obtained a second opinion	4	

SKIP TO Q. 94

---

93. At the time you were considering surgery, had you heard of any second surgical opinion programs?

YES	1	21/
NO (SKIP TO Q. 94)	2	

IF YES, ASK A:

A. Why did you decide not to use this program? (PROBE FOR ONE RESPONSE.)

22-23/

Now, I'd like to discuss what occurred in your (4th REFERENCE MONTH) visit to (FOURTH DOCTOR).

94. Exactly what did (FOURTH DOCTOR) say the problem was, that is, what was his/her diagnosis at the time of your (4th REFERENCE MONTH) visit? (RECORD DIAGNOSIS OR, IF UNKNOWN, DESCRIBE CONDITION.)

24-28/

(REFER TO CONTROL CARD. IF FOURTH DOCTOR DID NOT DISCUSS SURGERY, SKIP TO Q. 99.)

95. Was the operation you and (FOURTH DOCTOR) talked about in (4th REFERENCE MONTH) the same operation that you and (FIRST DOCTOR) discussed in (1st REFERENCE MONTH)?

YES (SKIP TO Q. 96)	1	
NO	2	29/

IF NO, ASK A:

A. What operation did you talk about with (FOURTH DOCTOR)?

_____
NAME OF OPERATION 30-33/

CARD 04

96. Is (FOURTH DOCTOR) a surgeon who could perform the operation him/herself?

YES	1	34/
NO.	2	

(BEFORE ASKING Q. 97, CODE FOURTH DOCTOR'S RECOMMENDATION FROM CONTROL CARD.)

97. When you visited (FOURTH DOCTOR) in (4th REFERENCE MONTH), you said that (he/she) . . (READ CIRCLED RESPONSE ONLY.)

Recommended surgery to treat your (CONDITION) (ASK A)	1	35/
Discouraged you from having surgery at that time (ASK B) . . .	2	
Discussed surgery without either recommending or discouraging it (SKIP TO Q. 98)	3	

IF RECOMMENDED SURGERY, ASK A:

A. When did (he/she) say you should have the operation? (READ LIST AND CODE ONE RESPONSE.)

As soon as possible	1	36/
Within one month	2	
Within three months	3	
Within six months	4	
Within twelve months	5	
THE DOCTOR DIDN'T SAY WHEN	6	

CARD 04

IF DISCOURAGED SURGERY, ASK B:

B. Why did (FOURTH DOCTOR) discourage surgery at that time to treat your (CONDITION)? Was it primarily because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

HAND CARD

(He/She) didn't think you actually had (CONDITION)	01	37-38/
(He/She) thought you had (CONDITION), but it wasn't bad enough then for you to have an operation	02	
(He/She) thought that you should try other kinds of treatment before you decided to have an operation	03	
(He/She) thought that because of other health problems you shouldn't have an operation	04	
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one at some time in the future	05	
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)	06	
Some other reason (SPECIFY) _____ _____	07	
THE DOCTOR DIDN'T SAY WHY	08	

---

98. In terms of your overall well-being, did (FOURTH DOCTOR) indicate that you would be (READ LIST) if you had the operation to treat your (CONDITION)? (CODE ONE RESPONSE.)

Much better off.	1	39/
Somewhat better off.	2	
Unchanged.	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

CARD 04

99. During the (4th REFERENCE MONTH) visit, did you and (FOURTH DOCTOR) talk about any other kinds of treatment instead of surgery, such as medicines, medical equipment or diet therapy?

YES (ASK A & B)	1	40/
NO (ASK C)	2	

IF YES, ASK A & B:

A. What other kinds of treatment did you talk about? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINE OR DRUGS.	1	41/
PHYSICAL THERAPY	2	42/
MEDICAL EQUIPMENT OR APPLIANCES (SUCH AS A TRUSS, EYEGLASSES, PESSARY, BRACES, OR PROSTHESIS)	3	43/
DIET THERAPY	4	44/
CHEMICAL/RADIATION THERAPY	1	45/
OTHER TREATMENT (SPECIFY)_____		
_____	2	46/ 47/

B. At that time, and in terms of your overall well-being, did (FOURTH DOCTOR) indicate that you would be (READ LIST) if you had (TREATMENT(S) CODED YES IN Q. 99A.)? (CODE ONE RESPONSE.)

Much better off (SKIP TO Q. 100).	1	48/
Somewhat better off (SKIP TO Q. 100). . . .	2	
Unchanged (SKIP TO Q. 100).	3	
Somewhat worse off, or (SKIP TO Q. 100) . .	4	
Much worse off (SKIP TO Q. 100)	5	
DID NOT INDICATE (SKIP TO Q. 100)	6	

IF NO, ASK C:

C. At that time, and in terms of your overall well-being, did (FOURTH DOCTOR) say that you would be (READ LIST) if your (CONDITION) was <u>not</u> treated at all? (CODE ONE RESPONSE.)

Much better off	1	49/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or	4	
Much worse off	5	
DID NOT INDICATE	6	

CARD 04

Now I would like to ask you a few questions about how you felt <u>after</u> your (4th REFERENCE MONTH) visit with (FOURTH DOCTOR).

100. After talking with (FOURTH DOCTOR) in (4th REFERENCE MONTH) did you think that you would have surgery to treat your condition in the near future?

YES	1	50/
NO.	2	

---

101. How certain were you at that time that this would be the best choice? Were you . . . (READ LIST AND CODE ONE RESPONSE.)

Very certain	1	51/
Fairly certain	2	
Fairly uncertain, or	3	
Very uncertain	4	

---

102. How strongly did you agree with (FOURTH DOCTOR's) diagnosis at that time? Would you say you . . . (READ LIST AND CODE ONE RESPONSE.)

Agreed strongly (SKIP TO Q. 103)	1	52/
Agreed somewhat (SKIP TO Q. 103)	2	
Disagreed somewhat, or	3	
Disagreed strongly	4	
DON'T KNOW (SKIP TO Q. 103).	8	

<u>IF DISAGREED SOMEWHAT OR STRONGLY, ASK A:</u>

A. What was the main reason you disagreed? (PROBE FOR ONE RESPONSE.)

53-54/

<u>IF FOURTH DOCTOR SEEN FOR A SECOND OPINION, ASK Q's. 103-105. OTHERWISE, SKIP TO Q. 106.</u>

103. In what way did the second opinion you obtained influence your final decision about surgery? (PROBE FOR ONE RESPONSE.)

55-56/

CARD 04

104. If you had not obtained a second opinion, do you think that you . . . (READ LIST AND CODE ONE RESPONSE.)

Definitely would have made the same decision	1	57/
Probably would have made the same decision	2	
Probably would <u>not</u> have made the same decision, or	3	
Definitely would <u>not</u> have made the same decision	4	

---

105. Did you give (FOURTH DOCTOR) permission to tell (FIRST DOCTOR) about your visit with (him/her)?

YES (SKIP TO Q. 106)	1	58/
NO	2	

<u>IF NO, ASK A:</u>

A. What was the main reason you did not give permission? Was it because . . . (READ LIST AND CODE ONE RESPONSE. IF MORE THAN ONE REASON, PROBE FOR THE MOST IMPORTANT.)

You felt (FOURTH DOCTOR) would be more objective if he or she had no contact with (FIRST DOCTOR)	1	59/
You thought (FIRST DOCTOR) would think your getting a second opinion was a waste of time and money	2	
You thought (FIRST DOCTOR) would be offended if he knew you got a second opinion	3	
(FOURTH DOCTOR) did not ask for permission to speak to (FIRST DOCTOR), or.	4	
Any other reason (SPECIFY) _____ _____	5	60/
PROGRAM DOESN'T ALLOW COMMUNICATION	6	

CARD 04

* SECTION V -- NO SECOND OPINION DOCTOR *

(ASK OF THOSE RESPONDENTS WHO DID NOT SEE A SECOND OPINION DOCTOR. IF RESPONDENT SAW A SECOND OPINION DOCTOR, SKIP TO SECTION VI ON PAGE 43.)

106. Did you consider getting a second opinion about whether or not to have surgery?

YES	1	61/
NO (SKIP TO Q. 107)	2	

IF YES, ASK A:

A. Why did you decide not to see a doctor for a second opinion? Was it because . . .(READ LIST. IF MULTIPLE RESPONSES, PROBE TO DETERMINE MOST IMPORTANT REASON. CODE ONE RESPONSE.)

HAND CARD

You had reached a final decision about surgery	01	62-63/
You had a transportation problem	02	
You were too busy and couldn't find the time	03	
You decided it would cost too much to get a second opinion	04	
Your condition is improving or has gone away so that you no longer need surgery	05	
Your test results were negative	06	
You were unable to schedule an appointment before surgery	07	
You were confident that the opinion you had already gotten was accurate, or	08	
Some other reason (SPECIFY) _____		
_____		
_____	09	

CARD 04

107. At the time you were considering surgery, had you heard of any second surgical opinion programs?

YES 1 64/
NO (SKIP TO Q. 108) 2

IF YES, ASK A:

A. What was the name of the program? (RECORD RESPONSE VERBATIM.)

65-66/

---

108. Did (any of) your doctor(s) suggest you see another doctor for an independent second opinion before deciding about surgery -- not counting any doctors (he/she/they) specifically sent you to?

YES 1 67/
NO 2

(CHECK Q. 15 TO SEE IF RESPONDENT HAS HAD OPERATION. IF "YES," USE FIRST WORDING IN PARENTHESES FOR Q's.109-112. IF "NO," USE SECOND WORDING.)

109. (Before surgery, did/Have) any friends or family members suggest(ed) you see another doctor for a second opinion before deciding about surgery?

YES 1 68/
NO 2

---

110. (Before surgery, had/Have) you seen or heard about any newspaper or magazine articles saying one should get a second opinion?

YES 1 69/
NO 2

---

111. (Before surgery, had/Have) you seen any radio or television announcements saying one should get a second opinion?

YES 1 70/
NO 2

CARD 04

112. (Did/Do) you think (any of) your doctor(s) might be offended if you got a second opinion?

YES	1	71/
NO	2	

CARD 04

* SECTION VI -- PRE-SURGERY *

113. After you had seen (the doctor/all the doctors) we have talked about, how concerned or worried were you about your (CONDITION)? Were you . . .(READ LIST AND CODE ONE RESPONSE.)

Very concerned	1	72/
Somewhat concerned	2	
A little concerned, or	3	
Not concerned at all	4	

---

114. At that time, how much risk did you believe was associated with the operation for your (CONDITION)? Did you believe there was . . . (READ LIST AND CODE ONE RESPONSE.)

A great deal of risk	1	73/
A moderate amount of risk	2	
A small amount of risk, or	3	
No risk at all	4	

---

115. How thorough an examination of your (CONDITION) did you feel you had obtained from the doctor(s) you had seen (before the time of surgery)? Did you think it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very thorough	1	74/
Somewhat thorough	2	
Not too thorough, or.	3	
Not thorough at all	4	

---

116. How well informed did you feel you were at that time about the operation? Did you feel you were . . . (READ LIST AND CODE ONE RESPONSE.)

Fully informed	1	75/
Somewhat informed, or	2	
Not very well informed	3	

CARD 05
11-12/05

117. How adequate did you consider the amount of time the doctor(s) you had seen spent discussing treatment other than surgery? Would you have said it was . . . (READ LIST AND CODE ONE RESPONSE.)

Very adequate	1	13/
Somewhat adequate	2	
Not too adequate, or.	3	
Not adequate at all	4	

---

118. (Just before surgery/Just before you decided not to have surgery), what were your expectations in terms of your overall well-being if you had the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	14/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

119. (Just before surgery/Just before you decided not to have surgery), what were your expectations in terms of your overall well-being if you did not have the operation to treat your (CONDITION)? Did you expect to be . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	15/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or.	4	
Much worse off	5	

---

120. Who would you say made the final decision about whether or not to have surgery? (DO NOT READ LIST. CODE ALL THAT APPLY.)

(FIRST DOCTOR).	1	16/
OTHER DOCTOR (SPECIFY) _____	2	17/
YOURSELF.	3	18/
YOUR PARTNER.	4	19/
A FRIEND.	1	20/
SELF AND (FIRST DOCTOR)	2	21/
(FIRST DOCTOR) AND OTHER DOCTOR	3	22/
OTHER (SPECIFY) _____	4	23/
		24/
		25/

CARD 05

121. How much control did you have over the decision about whether or not to have surgery? Would you say you had . . . (READ LIST AND CODE ONE RESPONSE.)

Total control	1	26/
Some control, or	2	
No control	3	

---

122. How would you regard <u>your role</u> in that decision? Would you say you had . . . (READ LIST AND CODE ONE RESPONSE.)

Too much responsibility	1	27/
About the right level of responsibility, or	2	
Too little responsibility	3	

CARD 05

* SECTION VII -- POST-SURGERY TREATMENT *

123. (CHECK Q. 15 ON PAGE 7 TO SEE IF RESPONDENT HAS HAD OPERATION. CODE BELOW.)

YES (ASK Q's. 124-127)	1	28/
NO (SKIP TO Q. 128)	2	

IF YES IN Q. 123, ASK Q's. 124-127:

124 A. When did you have the operation for your (CONDITION) that we have been talking about?

_____/_____ 29-32/
MONTH YEAR

B. Between the time of your (1st REFERENCE MONTH) visit to (FIRST DOCTOR) and the operation, did your condition become . . . (READ LIST AND CODE ONE RESPONSE.)

Much worse	1	33/
Somewhat worse, or.	2	
Not any worse	3	

---

125. What was the main reason you decided to have this surgery? (PROBE FOR ONE RESPONSE.)

34-35/

---

126. Who performed the operation?

DOCTOR'S NAME: _____ 36/

---

127. Was this the same operation that you and (FIRST DOCTOR) discussed in (1st REFERENCE MONTH)?

YES (SKIP TO Q. 130)	1	37/
NO	2	

IF NO, ASK A:

A. What operation did you have?

_____ 38-41/
NAME OF OPERATION

SKIP TO Q. 130

CARD 05

IF NO IN Q. 123, ASK Q's. 128-129:

128. What was the main reason you decided not to have surgery? (PROBE FOR ONE RESPONSE.)

42-43/

---

129. Do you think you will have an operation for your (CONDITION) at some future time?

YES	1	44/
NO (SKIP TO Q. 130).	2	

IF YES, ASK A:

A. When do you think you will have the operation? Will it be . . . (READ LIST AND CODE ONE RESPONSE.)

Within the next six months . . .	1	45/
Between six months and a year from now, or	2	
Over a year from now	3	

CARD 05

130. ASK ALL: Since (1st REFERENCE MONTH) when you and (FIRST DOCTOR) discussed surgery, what kinds of treatment (other than surgery) have you had? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINE OR DRUGS.	1	46/
PHYSICAL THERAPY	2	47/
MEDICAL EQUIPMENT OR APPLIANCES (SUCH AS A TRUSS, EYEGLASSES, PESSARY, BRACES, OR PROSTHESIS).	3	48/
DIET THERAPY	4	49/
CHEMICAL/RADIATION THERAPY . . .	1	50/
OTHER TREATMENT (SPECIFY) _____	2	51/ 52/
NO TREATMENT EXCEPT SURGERY (SKIP TO Q. 131).	3	53/
NO TREATMENT AT ALL (SKIP TO Q. 135).	4	54/

IF ANY TREATMENT CODED YES IN Q. 130, ASK A & B:

A. What doctor or doctors prescribed this treatment?

DOCTOR'S NAME:_____ 55/

DOCTOR'S NAME:_____

DOCTOR'S NAME:_____

B. Are you still (taking this treatment/using this appliance)?

YES	1	56/
NO.	2	

CARD 05

(QUESTIONS 131-134 ARE TO BE ASKED ABOUT THE OPERATION IF THERE WAS ONE. IF NO OPERATION, ASK ABOUT LAST TREATMENT.)

131. What doctor or doctors did you see for your check-up after your (operation/last treatment)?

DOCTOR'S NAME:_____ 57/

DOCTOR'S NAME:_____

DOCTOR'S NAME:_____

---

132. Were you hospitalized overnight for the (operation/last treatment)?

YES 1 58/

NO (SKIP TO Q. 133) 2

IF YES, ASK A:

A. How many nights were you in the hospital for the (operation/last treatment)?

_____ 59-60/
NIGHTS

---

133. How many days after you were home from the (operation/last treatment) were you able to care for yourself in terms of eating, bathing, dressing, and going to the bathroom?

_____ 61-62/
DAYS

---

134. A. Have you fully recuperated from the (operation/last treatment)?

YES 1 63/

NO. 2

B. How long from your (operation/last treatment) (did/will) it take you to fully recuperate? (RECORD ACTUAL/ESTIMATED LENGTH FROM DATE OF OPERATION/LAST TREATMENT. ENTER NUMBER NEXT TO APPROPRIATE TIME PERIOD.)

DAYS _____ 64-65/

WEEKS _____ 66-67/

MONTHS _____ 68-69/

CARD 05

135. How painful is your (CONDITION) now? Would you say . . .(READ LIST AND CODE ONE RESPONSE.)

Very painful.	1	70/
Moderately painful	2	
Mildly painful, or.	3	
Not painful at all (SKIP TO Q. 137).	4	

---

136. At this time, how frequently do you have pain? Would you say . . . (READ LIST AND CODE ONE RESPONSE.)

A little of the time	1	71/
Some of the time	2	
Most of the time, or.	3	
All of the time	4	

---

137. (Other than pain) are you now bothered by any symptoms -- that is, health or medical problems -- because of your (CONDITION)? When we say symptoms other than pain, we mean, for instance, blurred vision associated with cataracts or bleeding accompanying hemorrhoids.

YES	1	72/
NO (SKIP TO Q. 138)	2	
DON'T KNOW (SKIP TO Q. 138)	8	

IF YES, ASK A:

A. Altogether, how much would you say you are bothered by these problems -- because of your (CONDITION)? (Please include everything except for the pain you already mentioned.) Are you bothered . . .(READ LIST AND CODE ONE RESPONSE.)

A lot	1	73/
Some	2	
A little, or	3	
Not very much at all	4	

CARD 05-06

138. At this time, how much does your (CONDITION) interfere with things you are normally able to do? I am going to read a list of activities. For each one, please tell me whether your (CONDITION) causes a lot of interference, some interference, a little interference, or no interference.

	A LOT	SOME	A LITTLE	NO INTERFERENCE	NOT APPLICABLE	
Caring for yourself such as eating, bathing, dressing, going to the bathroom. .	1	2	3	4	5	74/
Walking and moving around inside the house.	1	2	3	4	5	75/
Getting around your community -- driving, riding the bus, and walking.	1	2	3	4	5	76/
Pursuing hobbies, sports, or recreation	1	2	3	4	5	77/
Performing other usual activities: a job, housework, going to school	1	2	3	4	5	78/

CARD 06
11-12/06

139. In terms of your overall well-being, how are you now as compared to (1st REFERENCE MONTH)? Are you now . . . (READ LIST AND CODE ONE RESPONSE.)

Much better off	1	13/
Somewhat better off	2	
Unchanged	3	
Somewhat worse off, or	4	
Much worse off	5	

CARD 06

140. Compared to other people who have (CONDITION), would you say your (treatment/operation) turned out. . . (READ LIST AND CODE ONE RESPONSE.)

Very much better	1	14/
Somewhat better	2	
About the same	3	
Somewhat worse, or	4	
Very much worse	5	

---

141. How satisfied are you with the way your (treatment/operation) has turned out? Would you say you are . . . (READ LIST AND CODE ONE RESPONSE.)

Very satisfied	1	15/
Somewhat satisfied	2	
Somewhat dissatisfied	3	
Very dissatisfied	4	

---

142. Compared with other people your age, is your health, in general, now . . . (READ LIST AND CODE ONE RESPONSE.)

Excellent	1	16/
Good	2	
Fair, or	3	
Poor	4	

---

143. In addition to your (CONDITION) that we have been talking about, have you ever been told by a doctor that you have any of the following conditions? (READ LIST AND CODE ONE RESPONSE FOR EACH ITEM.)

	YES	NO	
Diabetes	1	2	17/
Chronic anemia	3	4	18/
Chronic lung disease . . .	1	2	19/
Chronic heart disease . .	3	4	20/
Chronic kidney disease . .	1	2	21/
Chronic liver disease . .	3	4	22/
Serious overweight problem	1	2	23/

CARD 06

144. Aside from discussions with doctors that you have talked to about your (CONDITION), have you ever discussed surgery for some other condition?

YES	1	24/
NO (SKIP TO Q. 145)	2	

IF YES, ASK A:

A. Did you ever obtain an independent second opinion for any other operation that you have considered?

YES.	1	25/
NO	2	

---

145. Before you considered this operation, had you ever had surgery?

YES	1	26/
NO (SKIP TO Q. 146)	2	

IF YES, ASK A & B:

A. How many times had you had surgery?

_____ # OF TIMES 27-28/

B. In what year(s)? (IF MORE THAN 4 YEARS, TAKE THE 4 MOST RECENT.)

YEARS	
_____	29-30/
_____	31-32/
_____	33-34/
_____	35-36/

CARD 06

FOR MASSACHUSETTS DROPOUTS ONLY, ASK Q. 146. ALL OTHERS SKIP TO Q. 147.

146. Second opinion program records indicate that an appointment was made for you, as part of your Medicaid benefits, to get a second doctor's opinion about whether you should have an operation for your (CONDITION). We're interested in why you did not keep the appointment that was made for you. (READ LIST AND CODE ONE RESPONSE.)

Which of the following was the most important reason:

You decided not to have the operation	1	37/
You were too sick to go see the doctor	2	
You were too busy and couldn't find the time	3	
It was too big a problem to get somebody to take care of your children while you visited the doctor	4	
You had a transportation problem, or	5	
Some other reason (SPECIFY) _____ _____	6	38/

A. Do you . . . (READ LIST AND CODE ONE RESPONSE.)

Have another appointment scheduled	1	39/
Plan to schedule another appointment, or . .	2	
Have no plans to schedule an appointment . .	3	

CARD 06

147. Now I have some questions about your personal ideas and attitudes towards health care. I'm going to read some statements. For each one, I'd like you to tell me how strongly you agree or disagree with the statement as it applies to you personally. Here is a card which shows four possible answers. Please choose one of these answers for each statement.

HAND CARD

	AGREE COMPLETELY	AGREE SOMEWHAT	DISAGREE SOMEWHAT	DISAGREE COMPLETELY	
I try to avoid letting illness interfere with my life	1	2	3	4	40/
I worry about my health more than other people do . .	1	2	3	4	41/
I think that it is often useful to get a second opinion when deciding whether or not to have surgery	1	2	3	4	42/
When I'm sick, I try to just keep going as usual . .	1	2	3	4	43/
I will do just about anything to avoid going to the hospital	1	2	3	4	44/
It doesn't bother me to go to a doctor	1	2	3	4	45/
When I'm sick, I try to keep it to myself	1	2	3	4	46/
I believe some operations done by surgeons are not really necessary	1	2	3	4	47/
I believe some doctors aren't as thorough as they should be	1	2	3	4	48/
I believe doctors never recommend surgery unless there is no other way to solve the problem	1	2	3	4	49/

CARD 06

SECTION VIII -- HEALTH INSURANCE/DEMOGRAPHICS

148. The next questions are about the health insurance coverage you had in (1st REFERENCE MONTH) when (FIRST DOCTOR) discussed surgery. At that time, which of the following types of medical insurance did you have? (READ LIST. CODE ALL THAT APPLY.)

Medicare Part A which covers hospital bills	1	50/
Medicare Part B which covers doctor bills	2	51/
Supplementary Medicare	3	52/
Medicaid	4	53/
Blue Cross/Blue Shield	1	54/
Prepaid medical plan (HMO)	2	55/
Other private insurance	3	56/
CHAMPUS or CHAMPVA	4	57/
Other insurance (SPECIFY)_____		
_____	1	58/

A. About how much has your medical insurance paid for medical care for your (CONDITION) since (1st REFERENCE MONTH)?

$_____.00 59-64/
DOLLARS

DON'T KNOW 999998

---

149. Next let's talk about how much the tests and treatments for your (CONDITION) have cost you, personally, since (1st REFERENCE MONTH).

Since (1st REFERENCE MONTH) have you paid for or been billed for any health care, equipment, medications or services in connection with your (CONDITION)? Do not count any costs that your health insurance has paid, will pay or will reimburse you for.

YES	1	65/
NO (SKIP TO Q. 151)	2	

CARD 07
11-12/07

150. In connection with your (CONDITION), did you pay or were you billed anything for (ITEM) since (1st REFERENCE MONTH)? Do not count anything that insurance did or will pay. (CODE A RESPONSE FOR EACH ITEM.)

	YES	NO		IF YES, ASK A: A. How much? DOLLARS	
Hospitals or nursing homes	1	2	13/	$_____.00	14-17/
Clinics or laboratories . .	3	4	18/	$_____.00	19-22/
Doctors	1	2	23/	$_____.00	24-27/
Prescriptions or non-prescription drugs	3	4	28/	$_____.00	29-32/
Rehabilitation services -- physical therapy, occupational therapy, nutrition therapist, and so forth . .	1	2	33/	$_____.00	34-37/
Equipment and appliances -- such as eyeglasses, wheel chair, crutches, hospital bed, and so forth	3	4	38/	$_____.00	39-42/
Ambulance or rescue squad .	1	2	43/	$_____.00	44-47/

151. Since (1st REFERENCE MONTH) have you had a home health aide or homemaker services because of your (CONDITION)?

YES	1	48/
NO.	2	

CARD 07

REFER TO CONTROL CARD. IF THERE IS A SECOND OPINION DOCTOR, ASK Q's. 152-153. IF NO SECOND OPINION DOCTOR, SKIP TO Q. 156.

My next questions are about anything you or your family had to pay in connection with your visit(s) to (SECOND OPINION DOCTOR). Do not include anything that you think your insurance, Medicare, or Medicaid has paid or will pay.

152. Did you pay anything for . . . (READ LIST. CODE ONE RESPONSE FOR EACH ITEM.)

	YES	NO		IF YES, ASK A: A. How much? DOLLARS	
The doctor's visit(s)	1	2	49/	$_____.00	50-53/
X-rays or tests ordered by the doctor	3	4	54/	$_____.00	55-58/
Taxis, bus, or other transportation costs including parking fees, and so forth	1	2	59/	$_____.00	60-63/
Someone to take care of children or other family members while you visited the doctor	3	4	64/	$_____.00	65-68/

153. Did or will your insurance company, Medicare, or Medicaid pay (READ LIST) of the doctor's bills for (this/these) visits?

All	1	69/
A part, or	2	
None	3	

CARD 08
11-12/08

REFER TO CONTROL CARD. IF THERE IS A THIRD OPINION DOCTOR ASK Q's. 154-155. IF NO THIRD OPINION DOCTOR, SKIP TO Q. 156.

The next questions are about anything you or your family had to pay in connection with your visit(s) to (THIRD OPINION DOCTOR). Again, do not include anything that insurance, Medicare, or Medicaid has paid or will pay.

154. Did you pay anything for . . . (READ LIST. CODE ONE RESPONSE FOR EACH ITEM.)

	YES	NO		IF YES, ASK A: A. How much? DOLLARS	
The doctor's visit(s)	1	2	13/	$_____.00	14-17/
X-rays or tests ordered by the doctor	3	4	18/	$_____.00	19-22/
Taxis, bus, or other transportation costs including parking fees, and so forth	1	2	23/	$_____.00	24-27/
Someone to take care of children or other family members while you visited the doctor	3	4	28/	$_____.00	29-32/

155. Did or will your insurance company, Medicare, or Medicaid pay (READ LIST) of the doctor's bills for (this/these) visits?

All	1	33/
A part, or	2	
None	3	

Now I have just a few questions about you and your household.

156. How many people live in this household?

_____ # PERSONS 34-35/

157. How long have you lived in this community?

_____ YEARS 36-37/

CARD 08

158. Are you currently . . . (READ LIST AND CODE ONE RESPONSE.)

Married	1	38/
Separated	2	
Divorced	3	
Widowed, or	4	
Never married	5	

---

159. A. How old are you? _____ YEARS 39-40/

B. How old is (PATIENT)? _____ YEARS 41-42/

---

160. What was your occupation in (1st REFERENCE MONTH)? (IF EMPLOYED AT THAT TIME, RECORD JOB TITLE AND BUSINESS OR INDUSTRY ON THE LINES PROVIDED. IF NOT EMPLOYED AT THAT TIME, CIRCLE APPROPRIATE CODE BELOW OCCUPATION LINES.) 43-45/

JOB TITLE: _____

BUSINESS/INDUSTRY: _____

SKIP TO Q.162

STUDENT (SKIP TO Q. 163)	1	46/
HOUSEWIFE (SKIP TO Q. 163)	2	
RETIRED (ASK Q. 161)	3	
UNEMPLOYED (ASK Q. 161).	4	
DISABLED (SKIP TO Q. 163).	5	

IF RETIRED OR UNEMPLOYED IN Q. 160, ASK:

161. What was your last previous occupation? (PROBE FOR JOB TITLE AND BUSINESS OR INDUSTRY.)

JOB TITLE: _____

BUSINESS/INDUSTRY: _____

SKIP TO Q.163

---

162. Did you have a full-time paying job or a part-time paying job in (1st REFERENCE MONTH)?

FULL-TIME	1	47/
PART-TIME	2	

CARD 08

163. What is the highest grade or year of school you completed?

None	00								48-49/
Elementary	01	02	03	04	05	06	07	08	
High School	09	10	11	12					
College	13	14	15	16	17	18+			50-51/Blank

---

164. Here is a card with income categories. Please look at the card and tell me which category describes your total household income for 1980. Include all kinds of income -- wages and salaries, welfare, social security, pensions, and so forth. Count the income of all persons while they were living in this household during 1980.

HAND CARD

A. $0 - 7,999	1	52/
B. $8,000 - 14,999	2	
C. $15,000 - 29,999	3	
D. $30,000 or more	4	

---

165. What is your ancestry?

(IF NECESSARY, SAY: "for example; Afro-American, English, French, German, Honduran, Hungarian, Italian, Irish, Jamaican, Korean, Lebanese, Mexican, Nigerian, Polish, Ukrainian, Venezuelan, etc.")

_____ 53-54/
ANCESTRY

End Time: _____ 55-58/

AM	1	59/
PM	2	

INTERVIEWER:

IF PATIENT, ACCORDING TO CONTROL CARD, IS TO RECEIVE A CONDITION SUPPLEMENT, SAY:

Some people have symptoms associated with (CONDITION) that cause problems for them. Please fill in the answers to these questions about your experience with such symptoms.

RECORD FIRST DOCTOR'S NAME AND FIRST REFERENCE MONTH IN THE INDICATED SPACES ON FIRST PAGE OF SUPPLEMENT AND HAND TO RESPONDENT FOR SELF-ADMINISTRATION. IF THE PATIENT IS 12-17 YEARS, HE/SHE SHOULD FILL OUT THE SUPPLEMENT, NOT THE SUPERVISING ADULT.

AFTER RESPONDENT HAS COMPLETED SUPPLEMENT, OBTAIN MEDICAL RELEASE FORM, DOCTOR'S PERMISSION FORM AND ADDRESSES OF DOCTORS DISCUSSED IN SECTIONS I-IV.

CARD 08

INTERVIEWER OBSERVATION AND REMARKS

1. Sex of respondent:

Male	1	60/
Female	2	

2. Ethnicity of respondent:

Black, not of Hispanic origin	1	61/
White, not of Hispanic origin	2	
Hispanic	3	
American Indian or Alaskan Native	4	
Asian or Pacific Islander	5	
Other (SPECIFY)_____	6	

3. Did the respondent refer to records in answering visit or cost information questions?

YES	1	62/
NO	2	

4. How would you rate the overall cooperation of this respondent?

Excellent	1	63/
Good.	2	
Fair.	3	
Poor.	4	

5. Is there anything else we should know about this interview?

YES (SPECIFY)_____	1	64/
NO	2	

CODER I.D. 65-68/
Q.C. I.D. 69-72/

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Tonsillectomy and Adenoidectomy

The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have sore throats?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 2)	5	13/

1a. How bad were these sore throats?

Very bad	1	
Somewhat bad	2	
Not too bad	3	14/

2. At that time, how often did you have trouble breathing through your nose causing you to breathe through your mouth?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How serious was the trouble you had breathing through your nose?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	16/

3. At that time, did you have hot and swollen tonsils so that you couldn't breath and a fever (a condition known as "quinsy") such that an emergency operation was necessary?

Yes	1	
No.	2	17/

4. At that time, did you have periods where you couldn't hear very well that lasted longer than a month?

Yes	1	
No (Skip to Question 5)	2	18/

4a. Did you have these periods as many as three times during the year before?

Yes	1	
No	2	19/

5. At that time, how often did you have ear infections that kept coming back?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	20/

5a. How bad were these ear infections?

Very bad	1	
Somewhat bad	2	
Not too bad	3	21/

6. At that time, how often did you have trouble speaking clearly?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 7)	5	22/

6a. How serious was the trouble you had speaking clearly?

Very serious	1	
Somewhat serious	2	
Not too serious	3	23/

7. At that time, how often did your throat hurt when you were eating?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 8)	5	24/

7a. How badly did your throat hurt when you were eating?

Very badly	1	
Somewhat badly	2	
Not too badly	3	25/

8. At that time, how often did you miss time from school or work?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time.(Skip to Question 9)	5	
Did not work or attend school (Skip to Question 9)	6	26/

8a. How serious a problem did this time missed from school or work cause for you?

Very serious 1
Somewhat serious. 2
Not too serious 3 27/

The next questions should be answered in terms of how you are now.

9. How often do you now have sore throats?

All of the time 1
Most of the time 2
Some of the time 3
Little of the time 4
None of the time (Skip to Question 10) 5 28/

9a. How bad are these sore throats?

Very bad 1
Somewhat bad 2
Not too bad 3 29/

10. How often do you have trouble breathing through your nose causing you to breathe through your mouth?

All of the time 1
Most of the time 2
Some of the time 3
Little of the time 4
None of the time (Skip to Question 11) 5 30/

10a. How serious is the trouble you have breathing through your nose?

Very serious 1
Somewhat serious. 2
Not too serious 3 31/

11. Have you had a period where you couldn't hear very well in the past month?

Yes 1
No 2 32/

12. How often do you now have ear infections that come back?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 13)	5	33/

12a. How bad are these ear infections?

Very bad	1	
Somewhat bad	2	
Not too bad	3	34/

13. How often do you have trouble speaking clearly?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 14)	5	35/

13a. How serious is the trouble you have speaking clearly?

Very serious	1	
Somewhat serious	2	
Not too serious	3	36/

14. How often does your throat hurt when you eat?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 15)	5	37/

14a. How badly does your throat hurt when you eat?

Very badly	1	
Somewhat badly	2	
Not too badly	3	38/

15. How often do you miss time from school or work?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	
Do not work or attend school (Go to the end)	6	39/

15a. How serious a problem does this time missed from school or work cause for you?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	40/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Inguinal Herniorrhaphy (Hernia Operation)
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, were you aware of a mass in the groin area?

Yes	1	
No (Skip to Question 2)	2	13/

1a. How troublesome was this mass in the groin area?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	14/

2. At that time, how often did you have pain in the groin area?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How severe was this pain in the groin area?

Very severe	1	
Somewhat severe	2	
Not too severe	3	16/

3. At that time, how often did you have cramps in the abdominal or intestinal area?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 4)	5	17/

3a. How severe were these cramps in the abdominal or intestinal area?

Very severe	1	
Somewhat severe	2	
Not too severe	3	18/

The next questions should be answered in terms of how you are at the present time.

4. Are you now aware of a mass in the groin area?

Yes	1	
No (Skip to Question 5)	2	19/

4a. How troublesome is this mass?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	20/

5. How often do you now have the pain in the groin area?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	21/

5a. How severe is this pain in the groin area?

Very severe	1	
Somewhat severe	2	
Not too severe	3	22/

6. How often do you now have cramps in the abdominal or intestinal area?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	23/

6a. How severe are these cramps in the abdominal or intestinal area?

Very severe	1	
Somewhat severe	2	
Not too severe	3	24/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Cataract Removal
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have trouble reading handwriting, newsprint, or phone books?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 2)	5	13/

1a. How serious was the problem you had reading handwriting, newsprint, or phone books?

Very serious	1	
Somewhat serious	2	
Not too serious	3	14/

2. At that time, how often did you have trouble doing close or fine work by hand because of your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How serious was the problem you had doing close or fine work by hand?

Very serious	1	
Somewhat serious	2	
Not too serious	3	16/

3. At that time, how often did you have trouble driving because of your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 4)	5	
Do not drive (Skip to Question 4)	6	17/

3a. How serious was the problem you had driving?

Very serious	1	
Somewhat serious	2	
Not too serious	3	18/

4. At that time, how often did you have trouble walking because of poor vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 5)	5	19/

4a. How serious was the problem you had walking?

Very serious	1	
Somewhat serious	2	
Not too serious	3	20/

5. At that time, how often did you find that glasses or eyedrops did not help your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	21/

5a. How serious was the problem you had seeing even when using glasses or eye drops?

Very serious	1	
Somewhat serious	2	
Not too serious	3	22/

The next questions should be answered in terms of how you are at the present time.

6. How often do you now have trouble reading handwriting, newsprint, or phonebooks?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 7)	5	23/

6a. How serious is the problem you have reading handwriting, newsprint, or phonebooks?

Very serious	1	
Somewhat serious	2	
Not too serious	3	24/

7. How often do you now have trouble <u>doing close or fine work by hand</u> because of your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 8)	5	25/

7a. How serious is the problem you have doing close or fine work by hand?

Very serious	1	
Somewhat serious	2	
Not too serious	3	26/

8. How often do you now have trouble <u>driving</u> because of your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 9)	5	
Do not drive (Skip to Question 9)	6	27/

8a. How serious is the problem you have driving?

Very serious	1	
Somewhat serious	2	
Not too serious	3	28/

9. How often do you now have trouble <u>walking</u> because of your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 10)	5	29/

9a. How serious is the problem you have walking?

Very serious	1	
Somewhat serious	2	
Not too serious	3	30/

10. How often do you now find that <u>glasses or eye drops</u> do not help your vision?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	31/

10a. How serious is the problem you have seeing even when using glasses eye drops?

Very serious	1	
Somewhat serious	2	
Not too serious	3	32/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Hysterectomy
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have backaches?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 2)	5	13/

1a. How severe was the pain associated with these backaches?

Very severe	1	
Somewhat severe	2	
Not too severe	3	14/

2. At that time, how often did you have difficulty standing?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How serious was the difficulty you had standing?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	16/

3. At that time, how often did you have difficulty lifting things?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 4)	5	17/

3a. How serious was the difficulty you had lifting things?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	18/

4. At that time, how often did you feel pelvic pressure or discomfort?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 5)	5	19/

4a. How severe was the discomfort or pain associated with this pelvic pressure?

Very severe	1	
Somewhat severe	2	
Not too severe	3	20/

5. At that time, was your uterus getting larger?

Yes	1	
No (Skip to Question 6)	2	21/

5a. Was this happening fairly quickly?

Yes	1	
No	2	22/

6. At that time, did you have bleeding from the uterus at times other than your monthly period?

Yes	1	
No	2	23/

7. At that time, how often were your regular work activities limited?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 8)	5	24/

7a. How seriously limited were your regular work activities?

Very seriously.	1	
Somewhat seriously.	2	
Not too seriously	3	25/

8. At that time, how often were your regular sexual activities limited?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 9)	5	26/

8a. How seriously limited were your regular sexual activities?

Very seriously.	1	
Somewhat seriously.	2	
Not too seriously	3	27/

9. At that time, how often did you have pain during intercourse?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time	5	28/

10. At that time, were you able to use a vaginal support device called a pessary?

Yes	1	
No	2	
Did not try to use	3	29/

11. At that time, were you normally able to use a diaphragm?

Yes, normally able to use	1	
No, not able to use	2	
Did not try to use	3	30/

12. At that time, how often did you have difficulty controlling urine?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 13)	5	31/

12a. How serious was the difficulty you had controlling urine?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	32/

13. At that time, how often did you have difficulty making a bowel movement?

All of the time	1	
Most of the time	2	
Some of the time	3	
None of the time (Skip to Question 14)	4	33/

13a. How serious was the difficulty you had making bowel movements?

Very serious	1	
Somewhat serious	2	
Not too serious	3	34/

The next questions should be answered in terms of <u>how your are at the present time</u>.

14. How often do you now have backaches?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 15)	5	35/

14a. How severe is the pain associated with these backaches?

Very severe	1	
Somewhat severe	2	
Not too severe	3	36/

15. How often do you now have difficulty standing?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 16)	5	37/

15a. How serious is the difficulty you have standing?

Very serious	1	
Somewhat serious	2	
Not too serious	3	38/

16. How often do you now have difficulty lifting things?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 17)	5	39/

16a. How serious is the difficulty you have lifting things?

Very serious	1	
Somewhat serious	2	
Not too serious	3	40/

17. How often do you feel pelvic pressure or discomfort?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 18)	5	41/

17a. How severe is the discomfort or pain associated with this pelvic pressure?

Very severe	1	
Somewhat severe	2	
Not too severe	3	42/

18. At the present time, is your uterus getting larger?

Yes	1	
No (Skip to Question 19)	2	43/

18a. Is this happening fairly quickly?

Yes	1	
No	2	44/

19. Do you bleed from the uterus at times other than your monthly period?

Yes	1	
No	2	45/

20. How often are your regular work activities limited?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 21)	5	46/

20a. How seriously limited are your regular work activities?

Very seriously	1	
Somewhat seriously	2	
Not too seriously	3	47/

21. How often are your regular sexual activities limited?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 22)	5	48/

21a. How seriously limited are your regular sexual activities?

Very seriously	1	
Somewhat seriously	2	
Not too seriously	3	49/

22. How often do you have pain during intercourse?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time	5	50/

23. Are you able to use a vaginal support device called a pessary?

Yes	1	
No	2	
Do not try to use	3	51/

24. Are you normally able to use a diaphragm?

Yes, normally able to use	1	
No, not able to use	2	
Do not try to use	3	52/

25. How often do you now have difficulty in controlling urine?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 26)	5	53/

25a. How serious is this difficulty you have controlling urine?

Very serious	1	
Somewhat serious	2	
Not too serious	3	54/

26. How often do you have difficulty making a bowel movement?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	55/

26a. How serious is the difficulty you have making bowel movements?

Very serious	1	
Somewhat serious	2	
Not too serious	3	56/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Prostatectomy (Prostate Operation)
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have pain in the groin, bladder, or penis when urinating?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 2)	5	13/

1a. How severe was this pain?

Very severe	1	
Somewhat severe	2	
Not too severe	3	14/

2. At that time, how often did you have pain in the groin, bladder, or penis when not urinating?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How severe was this pain?

Very severe	1	
Somewhat severe	2	
Not too severe	3	16/

3. At that time, how often did you have urinary tract infections?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 4)	5	17/

3a. How serious or troublesome were these infections?

Very serious.	1	
Somewhat serious.	2	
Not too serious	3	18/

4. At that time, how often did you wake up more than once during the night to urinate?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 5)	5	19/

4a. How troublesome was this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	20/

5. At that time, how often did you have trouble starting the urinary stream?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	21/

5a. How troublesome was this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	22/

6. At that time, how often did you have trouble keeping the urinary stream going?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 7)	5	23/

6a. How troublesome was this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	24/

The next questions should be answered in terms of how you are at the present time.

7. How often do you now have pain in the groin, bladder, or penis when urinating?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 8)	5	25/

7a. How severe is this pain?

Very severe	1	
Somewhat severe	2	
Not too severe	3	26/

8. How often do you now have pain in the groin, bladder, or penis when not urinating?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 9)	5	27/

8a. How severe is this pain?

Very severe	1	
Somewhat severe	2	
Not too severe	3	28/

9. How often do you now have urinary tract infections?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 10)	5	29/

9a. How serious are these infections?

Very serious	1	
Somewhat serious	2	
Not too serious	3	30/

10. How often do you wake up more than once during the night to urinate?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 11)	5	31/

10a. How troublesome is this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	32/

11. How often do you now have difficulty starting the urinary stream?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 12)	5	33/

11a. How troublesome is this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	34/

12. How often do you now have difficulty keeping the urinary stream going?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	35/

12a. How troublesome is this for you?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	36/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Hemorrhoidectomy
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often were you troubled by "piles"?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 2)	5	13/

1a. How troublesome were these "piles"?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	14/

2. At that time, how often did you experience bulging of the "piles"?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 3)	5	15/

2a. How troublesome were these bulging "piles"?

Very troublesome	1	
Somewhat troublesome	2	
Not too troublesome	3	16/

3. At that time, how often did you have bleeding from the rectum?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 4)	5	17/

3a. How severe was this bleeding?

Very severe	1	
Somewhat severe	2	
Not too severe	3	18/

4. At that time, how often did you have pain, burning, or itching in your rectum?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 5)	5	19/

4a. How severe was this pain, burning, or itching?

Very severe	1	
Somewhat severe	2	
Not too severe	3	20/

The next questions should be answered in terms of <u>how you are at the present time</u>.

5. How often are you now troubled by "piles"?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	21/

5a. How troublesome are these "piles"?

Very troublesome.	1	
Somewhat troublesome.	2	
Not too troublesome	3	22/

6. How often do you experience bulging of "piles"?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 7)	5	23/

6a. How troublesome are these bulging "piles"?

Very troublesome.	1	
Somewhat troublesome.	2	
Not too troublesome	3	24/

7. How frequently do you have bleeding from the rectum?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 8)	5	25/

7a. How severe is this bleeding?

Very severe	1	
Somewhat severe	2	
Not too severe	3	26/

8. How frequently do you now have pain, burning, or itching in your rectum?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	27/

8a. How severe is this pain, burning, or itching?

Very severe	1	
Somewhat severe	2	
Not too severe	3	28/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

CARD 09

PATIENT INTERVIEW
CONDITION-SPECIFIC 1-10/
ID#_____ 11-12/09

Procedure: Cholecystectomy (Gallbladder Removal)
The following questions should be answered in terms of how you were when surgery was first discussed with Doctor _____ in _____.

1. At that time, how often did you have long periods of pain in the right upper abdomen?

All of the time 1
Most of the time 2
Some of the time 3
Little of the time 4
None of the time (Skip to Question 2) 5 13/

1a. How severe was this pain in the right upper abdomen?

Very severe 1
Somewhat severe 2
Not too severe 3 14/

2. At that time, how often did you have gastro-intestinal symptoms (such as gas or belching) or short attacks of sharp pain?

All of the time 1
Most of the time 2
Some of the time 3
Little of the time 4
None of the time (Skip to Question 3) 5 15/

2a. How severe were these attacks of pain?

Very severe 1
Somewhat severe 2
Not too severe 3 16/

3. At that time, how often did you have jaundiced, yellow-colored skin or eyes?

All of the time 1
Most of the time 2
Some of the time 3
Little of the time 4
None of the time (Skip to Question 4) 5 17/

3a. How serious was this condition of jaundiced, yellow-colored skin or eyes?

Very serious. 1
Somewhat serious. 2
Not too serious 3 18/

The next questions should be answered in terms of <u>how you are at the present time</u>.

4. How often do you now have pain in the right upper abdomen?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 5)	5	19/

4a. How severe is this pain in the right upper abdomen?

Very severe	1	
Somewhat severe	2	
Not too severe	3	20/

5. How often do you now have gastro-intestinal symptoms (such as gas or belching) or short attacks of sharp pain?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Skip to Question 6)	5	21/

5a. How severe are these attacks of pain?

Very severe	1	
Somewhat severe	2	
Not too severe	3	22/

6. How frequently do you now have jaundiced, yellow-colored skin or eyes?

All of the time	1	
Most of the time	2	
Some of the time	3	
Little of the time	4	
None of the time (Go to the end)	5	23/

6a. How serious is this condition of jaundiced, yellow-colored skin or eyes?

Very serious	1	
Somewhat serious	2	
Not too serious	3	24/

Thank you for your cooperation.

Please return this questionnaire to your interviewer.

Exhibit E.7

STATE OF MASSACHUSETTS - COUNTIES AND PSRO/HEALTH CARE FOUNDATION AREAS

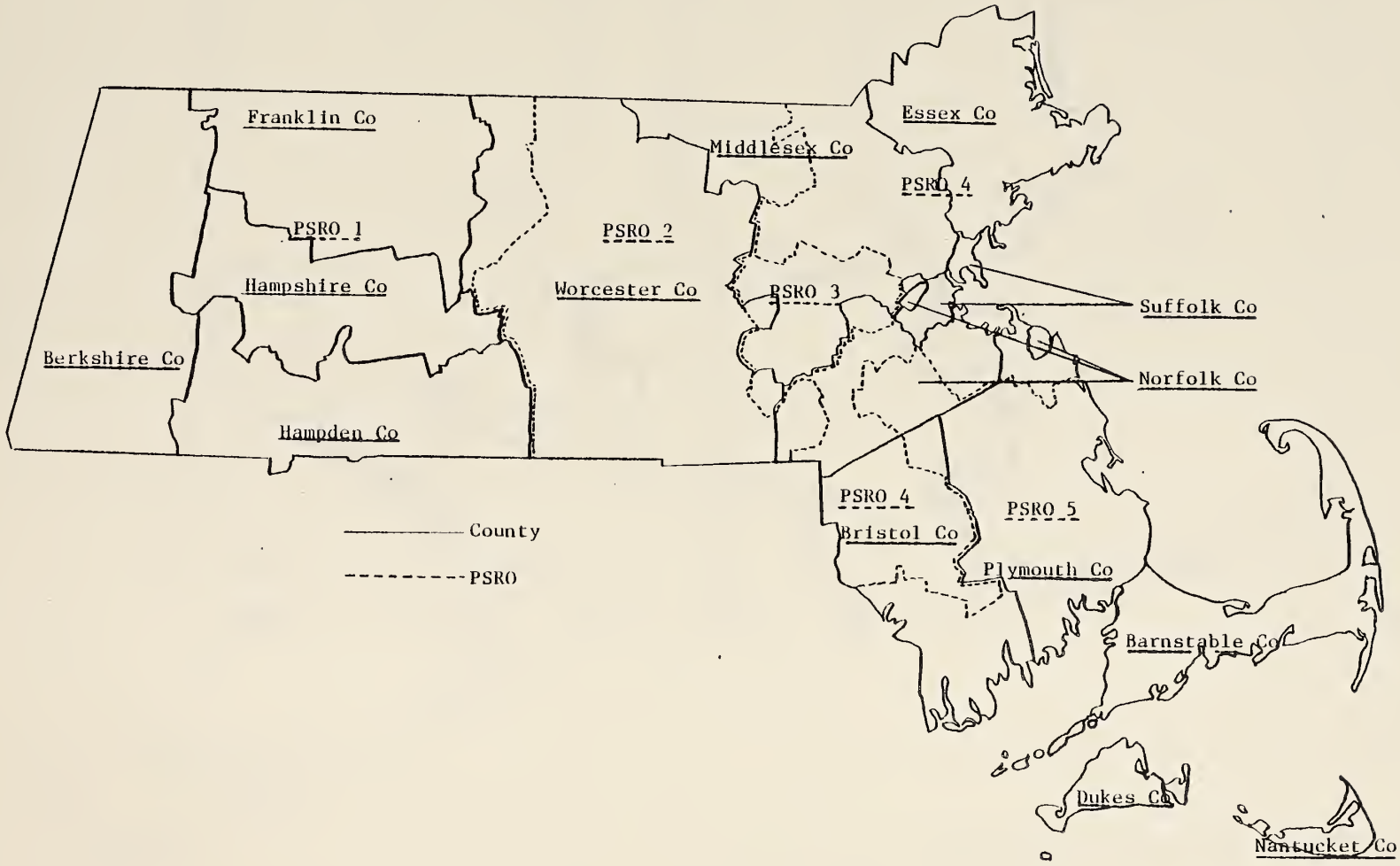

Exhibit E.8

STATE OF CONNECTICUT--COUNTIES, PSRO AREAS, AND WELFARE SERVICE DISTRICTS

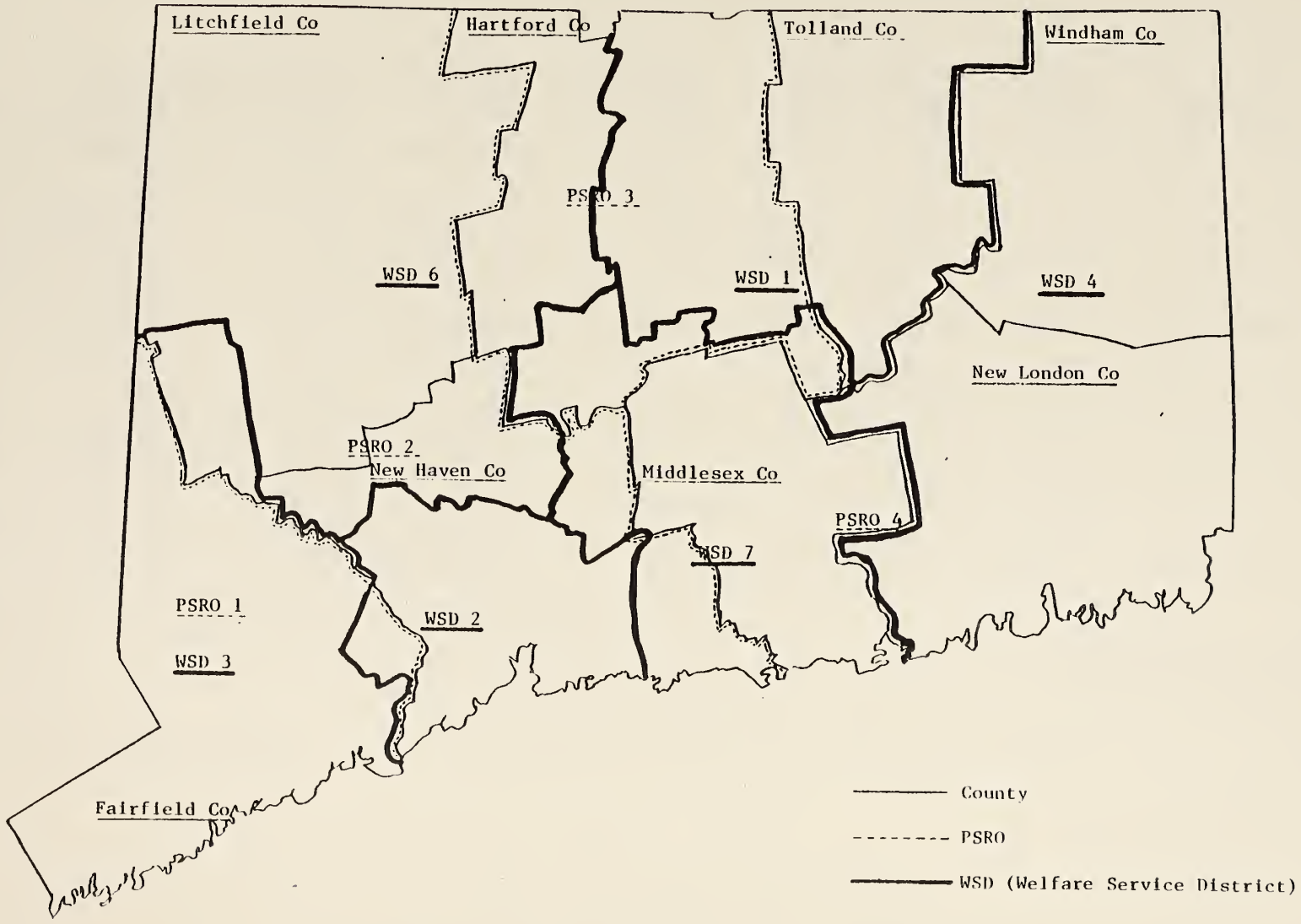

Exhibit E.9 : SAMPLE MONTHLY SUMMARY EXPENDITURES REPORT (MSER), MASSACHUSETTS DEPARTMENT OF PUBLIC WELFARE

MONTHLY SUMMARY EXPENDITURES REPORT REGIONS 01-07 MONTH ENDING APRIL 19/3

CATEGORY	TOTAL DIRECT PAYMENTS	TOTAL CREDITS	NET DIRECT PAYMENTS	FLAT GRANTS PAID THIS MO	TOTAL CASES	TOTALS RECIPIENTS	ADULTS CASES	FAMILY CASES	NO DEPN
CRP	$912,639.65	$.00	$912,639.65	$.00	2,872	6,005	0	0	
OAA	$.00	$.00	$.00	N.A.	0	0	0	0	
AFDC-UF	$2,208,739.59	$.00	$2,208,739.59	$.00	5,150	21,859	0	0	
AFDC-BASIC	$39,592,763.27	$.00	$39,592,763.27	$.00	119,278	325,596	0	0	
DA	$45.85	$.00	$45.85	N.A.	1	1	0	0	
GR	$3,811,863.99	$.00	$3,811,863.99	N.A.	22,179	23,294	20,017	418	1,227
MA-OAA	$9,891.67	$.00	$9,891.67	N.A.	41,958	41,994	0	0	
MA-AFDC	$.00	$.00	$.00	N.A.	7,114	20,809	0	0	
MA-OA	$9,045.29	$.00	$9,045.29	N.A.	8,687	8,697	0	0	
MA-UNDER 21	$1,151.31	$.00	$1,151.31	N.A.	8,593	13,216	0	0	
EA	$.00	$.00	$.00	N.A.	0	0	0	0	
TOTAL ALL REGIONS	$46,546,140.62	$.00	$46,546,140.62	$.00	215,832	461,471	20,017	418	1,227

NEW YORK MEDICARE DEMONSTRATION PROGRAM FORMS

REFERRAL CENTER INTAKE

SECOND SURGICAL OPINION PROGRAM

DATE OF CONTACT WITH CENTER: 3-20-80 | TIME RECEIVED: 2 | TIME COMPLETED: 2 | TOTAL MINUTES: 20 | CODE: | ANALYST NAME: MJ

BENEFICIARY NAME: [illegible] | HIC NUMBER: [illegible] | OCCUPATION: PR | RETIREE CODE: Yes ✓

STREET ADDRESS: [illegible] | COUNTY: St Jackson Heights | CODE: 11 | STATE: NY | CODE:

ZIP CODE: 11372 | APT: 2UT | TELEPHONE: [illegible] | DATE OF BIRTH: MO 7 DAY [illegible] YEAR 19 | SEX: M ☐ F ☐ | MARITAL STATUS: 1 S 2 M 3 W ✓ 4 D 5 A(sep) | DISABLED: YES ☐ NO ✓

DIAGNOSIS: Cataract left eye

Cataract situation | CODE:

SURGICAL PROCEDURE (CHECK ONE AND DESCRIBE): DISCUSSED ☐ RECOMMENDED ✓ | CODE: 1104

NAME OF P.O.S.: [illegible] | CODE: 17005 | STREET ADDRESS: [illegible]

SPECIALTY: opd | CODE: 12 | SUB SPEC. | CODE | COUNTY: NYC N.Y. | STATE | ZIP CODE: 10025

DATE OF MOST RECENT APPOINTMENT WITH SURGEON: MO. 3 DAY 13 YEAR 80 | WITHIN WHAT TIME FRAME: 1 ONE MONTH ✓ 2 FOUR MONTHS ☐ 3 MORE THAN FOUR MONTHS ☐

WERE DIAGNOSTIC TESTS PERFORMED? 1 YES ☐ 2 NO ✓ | CODE | RESULTS | CODE

IF YES, TYPE:

IF SURGERY IS TO TREAT A MALIGNANCY, WAS A BIOPSY PERFORMED? 1 YES ☐ 2 NO ☐

IF BIOPSY DONE, WERE RESULTS POSITIVE? 1 YES ☐ 2 NO ☐

IF NOT DONE, PLANNED? 1 YES ☐ 2 NO ☐

IF SURGERY WAS RECOMMENDED, HAS IT BEEN SCHEDULED? 1 YES ✓ 2 NO ☐

IF YES, DATE SCHEDULED: MONTH 4 DAY | YEAR 80

IS BENEFICIARY ELIGIBLE FOR A SECOND OPINION? 1 YES ✓ 2 NO ☐

MEANS BY WHICH ELIGIBILITY ESTABLISHED: 1 CRT ☐ 2 BEST FILE ✓ 3 Z QUERY ☐

IF NOT ELIGIBLE, CHECK REASON

1 ☐ PROCEDURE NOT COVERED, EMERGENCY-MEDICAL
☐ PROCEDURE NOT COVERED, CONTRACT EXCLUSION
3 ☐ CONTRACT NOT CURRENT
4 ☐ OVER 120 DAYS SINCE SEEN BY SURGEON
5 ☐ SECOND OPINION OBTAINED WITHOUT ARRANGING THROUGH REFERRAL CENTER
6 ☐ OTHER (SPECIFY)

FOR ELIGIBLE BENEFICIARIES ONLY

LOCATION OF SURGERY: 1 HOSPITAL INPATIENT ☐ 2 HOSP. O.P.D. ☐ 3 M.D. OFFICE ☐ 4 OTHER ☐

NAME OF HOSPITAL RECOMMENDED: St Lukes | CODE:

DOES BENEFICIARY WISH F.O.S. TO BE INFORMED OF CONSULTATION? 1 YES ☐ 2 NO ✓ IF NO, GIVE REASON: confidential

IF YES, GIVE DATE F.O.S. FORMS SENT: MO. DAY YEAR

WAS S.O.S. INFORMED OF F.O.S. COMMENTS? 1 YES ☐ 2 NO ☐

DATE RETURNED: MO. DAY YR.

NAME AND PHONE NUMBER'S OF SURGEONS GIVEN TO BENEFICIARY

1. [illegible] NYC 10021

2. [illegible]

3. [illegible] Lexington Ave [illegible]

DO YOU WISH REFERRAL CENTER TO SCHEDULE APPOINTMENT FOR YOU? 1 YES ☐ 2 NO ✓ | IF YES, CONVENIENT DATES AND TIME:

HOW DID YOU HEAR ABOUT THE PROGRAM? 1 SR. CITIZEN GRP. ☐ 2 NEWSPAPER ☐ 3 RADIO ☐ 4 T.V. ☐ 5 FRIEND ☐ 6 RELATIVE ☐ 7 OTHER (SPECIFY) Med Trust ✓

DOES BENEFICIARY HAVE OTHER INSURANCE? 1 YES ✓ 2 NO ☐

IF YES, TYPE: 1 MEDICAID ☐ 2 BC/BS ✓ 3 COMMERCIAL ☐ 4 OTHER (DESCRIBE) ☐

F.O.S. PROFILE INFORMATION

F.O.S. NAME | PROVIDER CODE | CERTIFIED 1 YES ✓ 2 NO ☐ 3 UNKNOWN ☐ IF YES, DATE MO. DAY YEAR

TELEPHONE | MEDICAL SCHOOL | CODE | YEAR OF GRADUATION: 71

HOSPITAL AFFILIATIONS

1 St. Lukes | CODE | 3 | CODE

2 | CODE | 4 | CODE

HCFA-36T PRES 23 1 78

app CP 3-20-80 NSC/c

NAME OF CONSULTANT SELECTED FOR S.O.	PROVIDER CODE	DATE AND TIME OF APPOINTMENT
		3 | 24 | 80 | P

IF BENEFICIARY ARRANGED APPOINTMENT, DATE CENTER CONFIRMED WITH S.O.S.	IF CENTER ARRANGED APPOINTMENT, DATE BENEFICIARY NOTIFIED

DATE APPT. CARD & FORMS SENT TO BENEFICIARY	CHECK THIS BOX IF BENEFICIARY DID NOT KEEP APPOINTMENT	IF NO, WAS APPT. RESCHEDULED	IF YES, DATE AND TIME RESCHEDULED
	☐	☐ YES ☐ NO	

THIRD OPINION APPOINTMENTS

DATE BENEFICIARY CALLED FOR THIRD OPINION	REASON

	CODE

NAME AND PHONE NUMBERS OF SURGEONS GIVEN TO BENEFICIARY

A.

B.

C.

NAME OF CONSULTANT SELECTED	CODE	DATE AND TIME OF APPOINTMENT

IF BENEFICIARY ARRANGED APPOINTMENT, DATE CENTER CONFIRMED WITH S.O.S.	IF CENTER ARRANGED APPOINTMENT, DATE BENEFICIARY NOTIFIED

DATE APPT. CARD & FORMS SENT TO BENEFICIARY	CHECK THIS BOX IF BENEFICIARY DID NOT KEEP APPOINTMENT	IF NO, WAS APPOINTMENT RESCHEDULED?	IF YES, DATE RESCHEDULED
	☐	☐ Yes ☐ No	

RECORD OF TELEPHONE CALLS

DATE CALLED	TO/FROM	REASON*	OUTCOME
3/21/80	Benef letter sent		

The authority for collecting the above information is contained in section 402 (a) of the 1967 Amendments to the Social Security Act as amended by section 222 (b) of the 1972 Amendments to the Social Security Act, P.L. 92-603. Disclosure of such information is voluntary.

The information collected on this form will be used to conduct referrals and to evaluate the impact of the programs. If individuals do not provide the information, they may not be able to obtain a consultation with waivers of co-payment and deductible requirements.

Blue Cross
Blue Shield
of Greater New York

P.O. Box 551, New York, N.Y. 10016

SURGICAL SECOND OPINION PROGRAM
FIRST OPINION SURGEON REPORT

[redacted]
[redacted]
[redacted]
New York, N.Y.

4-3-80

BENEFICIARY NAME			HIC NUMBER	
[redacted]			[redacted]	
STREET ADDRESS	COUNTY	STATE	ZIP CODE	APARTMENT

TO BE COMPLETED BY FIRST OPINION SURGEON

DIAGNOSIS (STANDARD NOMENCLATURE PLEASE) — CODE *

HISTORY AND FINDINGS OF SIGNIFICANCE

WAS SURGERY RECOMMENDED? 1 ☑ YES 2 ☐ NO — IF YES, PROCEDURE: Coronary Endarterectomy — CODE

IF SURGERY IS RECOMMENDED TO TREAT A MALIGNANCY, WAS A BIOPSY DONE? 1 ☐ YES 2 ☐ NO — IF BIOPSY WERE DONE, WERE RESULTS POSITIVE? 1 ☐ YES 2 ☐ NO — IF NOT DONE, PLANNED? 1 ☐ YES 2 ☐ NO

PLACE WHERE SURGERY WOULD BE PERFORMED: 1 ☐ HOSP. IN PT. 2 ☐ HOSP. O.P.D. 3 ☐ M.D. OFFICE 4 ☐ OTHER (SPECIFY) — IF IN HOSPITAL, PLEASE GIVE NAME OF INSTITUTION: St Luke's Hosp Center — CODE

IF SURGERY NOT RECOMMENDED, PLEASE STATE TYPE OF SURGERY DISCUSSED — CODE

TYPE OF PRACTICE: 1 ☑ SOLO 2 ☐ GROUP — PHYSICIAN'S SIGNATURE: [signature] — DATE OF EXAMINATION: 3/19/80

The authority for collecting the above information is contained in section 402(a) of the 1967 Amendments to the Social Security Act, as amended by section 222(b) of the 1972 Amendments to the Social Security Act, P.L. 92–603. Disclosure of such information is voluntary.

The information on this form will be used to aid consultants in evaluating the beneficiary's condition and to evaluate the impact of the program. If individuals to not provide the information, consultant opinions will lack background on the beneficiary which only the first opinion surgeon can provide and evaluation will be impaired. However, non-disclosure will not personally affect the first opinion surgeon.

*Codes for Blue Cross and Blue Shield of Greater New York use only

HCFA-37[redacted]

P. O'CONNOR APR 16 1980

PRES 21 (12-79)

Blue Cross
Blue Shield
of Greater New York

P.O. Box 551, New York, N.Y. 10016

SURGICAL SECOND OPINION PROGRAM
CONSULTANT'S REPORT

HIC NUMBER

DO NOT DETACH
REFERRAL CENTER COPY

CONSULTANT'S DX (STANDARD NOMENCLATURE)	CODE*
CATARACT (R) & (L) eye	
	CODE
NEED FOR SURGERY: 1. ☐ CONFIRMED 2. ☒ NOT CONFIRMED — IF NEED FOR SURGERY IS CONFIRMED, PROCEDURE RECOMMENDED	CODE
	CODE

SURGERY NOT RECOMMENDED BECAUSE: (CHECK ONE OR MORE AS INDICATED)

1. ☐ NO TREATMENT IS NECESSARY
2. ☐ NO PATHOLOGY FOUND
7. ☐ OTHER
3. ☐ A TRIAL OF MEDICAL MANAGEMENT IS INDICATED
   A. ☐ MEDICATION C. ☐ DIET THERAPY
   B. ☐ P.T. D. ☐ OTHER
4. ☐ COMPLICATING CONCURRENT CONDITIONS PRESENT (SPECIFY)
5. ☒ RE-EVALUATION INDICATED
6. ☐ FURTHER DIAGNOSTIC STUDIES INDICATED

CONSULTANT'S REMARKS
SURGERY ONLY NECESSARY when vision decreases to the point [illegible]

RECOMMENDED LOCATION FOR SURGERY
1 ☐ HOSP. INPATIENT 2 ☐ HOSP. O.P.D. 3 ☐ M.D. OFFICE 4 ☐ OTHER

PLEASE LIST ANY LAB TESTS ORDERED	CODE	RESULTS	CODE
1		1	
2		2	
3		3	

REASON FOR ORDERING LAB TESTS OR X-RAYS
1 ☐ DID NOT RECEIVE FIRST SURGEON'S REPORT 3 ☐ EXISTING REPORTS INCONCLUSIVE 5 ☐ OTHER
2 ☐ UPDATED RESULTS REQUIRED 4 ☐ EXISTING RESULTS NEEDED VERIFICATION

BY OBSERVATION, PLEASE STATE PATIENT'S ETHNICITY
1 ☐ WHITE (NOT OF HISPANIC ORIGIN) 2 ☐ BLACK (NOT OF HISPANIC ORIGIN) 3 ☐ HISPANIC 4 ☐ AMERICAN INDIAN 5 ☐ ALASKAN NATIVE 6 ☐ ASIAN OR PACIFIC ISLANDER

DID YOU DISCUSS YOUR FINDINGS WITH THE FIRST SURGEON? ☐ YES ☒ NO

SIGNATURE	DATE OF APPOINTMENT
P. O'CONNOR	3-24-80

APR 15 1980

The authority for collecting the above information is contained in section 402(a) of the 1977 Amendments to the Social Security Act as amended by section 222(b) of the 1972 Amendments to the Social Security Act, P.L. 92-603. Disclosure of such information is voluntary.

The information collected on this form will be used to evaluate the impact of the program. If individuals do not provide the information their agreement as a participating consultant may be terminated with 30 days notice.

*Codes for use of Blue Cross and Blue Shield of Greater New York only.

HCFA-38T

PRES 22 (11-79)

Exhibit E.11

DETROIT MEDICARE DEMONSTRATION PROGRAM FORMS

HCFA-36T

(Please Print)

MEDICARE SURGICAL SECOND OPINION PROGRAM (MSSOP)
REFERRAL CENTER INTAKE

PART A: ELIGIBILITY DETERMINATION *(Complete during telephone interview, except coding)*

BENEFICIARY'S CONTACT WITH REF. CENTER: DATE: 03-28-80	TIME REC'D: 3 30	COMPLETED: 3 50	TOTAL MINUTES: 20	ANALYST: A. Warner.
01. HIS NUMBER: [illegible]	02. OPINION: [1] X SECOND [2] THIRD		03. MSSOP NUMBER: M#0254	
BENEFICIARY'S NAME (Last): [illegible]	(First):		(Middle Initial):	
BENEFICIARY'S ADDRESS (Number): [illegible]	(Street):	(City): Highland Park.	APARTMENT NUMBER: 414	
05. (County): 82	06. (State): Mi.		07. (Zip Code): 48203.	
DIAGNOSIS OR NATURE OF COMPLAINT: Cataract rt. eye.			07. DX. CODE: 3749	
SURGICAL PROCEDURE DISCUSSED (Description): Cataract extraction rt. eye			08. PROC. CODE: 5611	

NOTE: If third opinion is requested, proceed to Part C.

09. WAS SURGERY RECOMMENDED BY PHYSICIAN? [1] X YES [2] NO	10. IS THIS FIRST OPINION PHYSICIAN A SURGICAL SPECIALIST? [1] X YES [2] NO [3] UNKNOWN		
11. DATE ON WHICH ELECTIVE SURGERY WAS DISCUSSED WITH FIRST OPINION PHYSICIAN (F.O.P.): April. MO. 02 DAY 26 YEAS 80	12. IF F.O.P. RECOMMENDED SURGERY, HAS IT BEEN SCHEDULED? [1] YES [2] X NO		
13. SITE OF SURGERY: [1] X HOSPITAL INPATIENT [2] HOSPITAL OUTPATIENT [3] DOCTOR'S OFFICE [4] OTHER			14. DATE OF SURGERY
NAME AND ADDRESS OF SITE OF SURGERY: Hutzel (23076)			15. IS BENEFICIARY ELIGIBLE FOR CONSULTATION? [1] X YES [2] NO
16. IF NOT ELIGIBLE, CHECK REASON: [1] PROCEDURE NOT COVERED, EMERGENCY [3] PROCEDURE NOT COVERED, CONTRACT EXCLUSION [5] PROCEDURE NOT COVERED, PROJECT EXCLUSION [6] MEDICARE CONTRACT NOT CURRENT [9] BENEFICIARY RESIDES OUTSIDE STUDY AREA [0] OVER 120 DAYS [7] CLAIM ALREADY PROCESSED			

PART B: FOR ELIGIBLE BENEFICIARIES ONLY *(Complete during telephone interview, except coding)*

17. DATE OF BIRTH MO. 04 DAY 27 YEAR 05	18. IS BENEFICIARY RETIRED? [1] X YES [2] NO	OCCUPATION (Specify): Retired	19. OCCUPATION CODE: 0	20. SEX [1] M [2] X F
21. MARITAL STATUS: [1] SINGLE [2] MARRIED [3] X WIDOWED [4] DIVORCED [5] SEPARATED				
NAME OF FIRST OPINION PHYSICIAN (Last, First, Middle Initial): [illegible]	22. TYPE OF DOCTOR, FIRST OPINION PHYSICIAN: [1] X M.D. [2] D.O.	[3] O.P.M. [4] ORAL SURG.		
OFFICE ADDRESS (Number, Street, City, County, State, Zip Code): [illegible] Detroit (82) mi. 48202			TELEPHONE NUMBER: [illegible]	

23. DOES BENEFICIARY WISH FIRST OPINION PHYSICIAN TO BE INFORMED OF THE CONSULTATION OUTCOME? IF NO, GIVE REASON: [1] YES [2] X NO

24. DOES BENEFICIARY WISH FIRST OPINION PHYSICIAN TO BE INFORMED OF CONSULTATION OUTCOME? IF NO, GIVE REASON: [1] YES [2] X NO

25. HOW DID THE BENEFICIARY HEAR ABOUT THE PROGRAM?

[1] SENIOR CITIZEN GROUPS [2] NEWSPAPER [3] X OTHER (Specify): Brochure C Eomb. 16 X
[2] RADIO [4] PHYSICIAN

26. DOES BENEFICIARY HAVE OTHER HEALTH INSURANCE? [1] X YES [2] NO	27. IF YES, CHECK APPROPRIATE BOXES: [1] MEDICAID [2] X BLUE CROSS/BLUE SHIELD	[3] COMMERCIAL [4] OTHER

CONVENIENT DATES AND TIMES TO SCHEDULE APPOINTMENTS: Mon. Tues. Fri.

NOTE: The authority for collecting the above information is contained in section 402(a) of the 1967 amendments to the Social Security act, as amended by section 222(b) of the 1972 amendments to the Social Security Act, P.L. 92-603. Disclosure of such information is voluntary. The information collected on this form will be used to conduct referrals and to evaluate the impact of the program. If individuals do not provide the information, they may not be able to obtain a consulation with waiver of copayment and deductible requirements.

2981-9 MAR 78

(OVER)

HCFA-36T

PART B *(Continued)*

GEOGRAPHIC AREA PREFERRED FOR APPOINTMENT *(Describe)*: Close to home if poss.

BENEFICIARY'S TELEPHONE NUMBER: –

HOURS TO BE CALLED: any time

NOTE: At this point, beneficiary will be provided with names of appropriate consultants from which to choose.

PART C. CONSULTATION APPOINTMENTS

NAME OF CONSULTANT SELECTED *(Last, First, Middle Initial)*: [illegible] M.D.

APPOINTMENT SCHEDULED AT *(Number)* *(Street)* *(City)* *(County)* *(State)* *(Zip Code)*: [illegible] Southfield (63) Mi. 48075

28. PROVIDER CODE: [illegible] SPECIALTY: Opthal. (Tel. [illegible])

29. APPOINTMENT DATE: 04-25-80 APPOINTMENT TIME: 11:00 AM RECEPTIONIST: Mrs. L[illegible]

DATE REFERRAL CENTER TELEPHONED CONSULTANT TO ARRANGE APPOINTMENT: 03-28-80

DATE REFERRAL CENTER CONFIRMED APPOINTMENT WITH BENEFICIARY: 03-28-80

30. DID BENEFICIARY KEEP APPOINTMENT AS SCHEDULED? [1] X YES [2] NO

31. IS APPOINTMENT RESCHEDULED? [1] YES [2] X NO

NAME OF CONSULTANT SELECTED IF DIFFERENT FROM ABOVE *(Last, First, Middle Initial)*:

ADDRESS AT WHICH APPOINTMENT RESCHEDULED *(Number, Street, City, County, State, Zip Code)*:

32. PROVIDER CODE: SPECIALTY:

33. APPOINTMENT DATE: APPOINTMENT TIME: RECEPTIONIST:

PART D: FORMS CONTROL

DATES FOR F.O.P. FORMS

BLANK FORMS SENT TO F.O.P.	CENTER TELEPHONED F.O.P. FOR FORM INFORMATION *(If not mailed)*	COMPLETED FORM RECEIVED BY CENTER	COMPLETED FORM SENT TO CONSULTANT
	—		3/31/80

DATES FOR CONSULTANT'S REPORT AND CLAIM FORM

BLANK FORMS SENT TO CONSULTANT	CENTER RECEIVED COMPLETED FORMS	COMPLETED CONSULTANT'S REPORT SENT TO F.O.P.	CLAIM FORM APPROVED BY CENTER	APPROVED CLAIM FORM SENT FOR PROCESSING
3/31/80	5-1-80	—	6/2/80	7/11/80

PART E: FIRST OPINION PHYSICIAN PROFILE

34. F.O.P. PROVIDER CODE: [illegible]

35. F.O.P. SPECIALTY CODE: 18

36. SUB-SPECIALTY CODE: —

37. F.O.P. CERTIFICATION: [1] X CERTIFIED [2] ELIGIBLE [3] UNKNOWN

38. DATE OF CERTIFICATION MO. DAY YEAR: 59

39. DATE OF GRADUATION F.O.P. *(Year)*: 1952

MEDICAL SCHOOL: [illegible]

40. MEDICAL SCHOOL CODE: 00702

HOSPITAL AFFILIATION (1): Hutzel

41. HOSP. AFFIL. CODE (1): 230076

HOSPITAL AFFILIATION (2):

42. HOSP. AFFIL. CODE (2):

PART F: ADDITIONAL TELEPHONE CALLS

DATE	TIME	TO/FROM	REASON/ACTION

CONSULTANT'S FEE: 50.—

TOTAL AMOUNT PAID FOR ANCILLARIES: 0

2981-9 MAR 78

Blue Cross Blue Shield of Michigan

REFERRAL CENTER #J713
600 LAFAYETTE EAST, DETROIT, MICHIGAN 48226

-OFA - 37-

MEDICARE SURGICAL SECOND OPINION PROGRAM (MSSOP)

FIRST OPINION PHYSICIAN'S REPORT

TO BE COMPLETED BY REFERRAL CENTER
(PLEASE PRINT OR TYPE)

01. H.I.B. NUMBER	02. MSSOP NUMBER
[illegible]	M0d257

BENEFICIARY'S NAME (LAST)	(FIRST)	MIDDLE INITIAL
[illegible]	[illegible]	

BENEFICIARY'S ADDRESS (NUMBER)	(STREET)	(CITY)	APARTMENT NUMBER
[illegible]	[illegible]	Highland Pk.	414

03. (COUNTY)	04. (STATE)	05. ZIP CODE
82	Mich	48203

TO BE COMPLETED BY FIRST OPINION PHYSICIAN
(PLEASE PRINT OR TYPE)

DIAGNOSIS (STANDARD NOMENCLATURE) PRIMARY: Cataract rt. eye — 06. DX CODE: 3749

07. WAS SURGERY RECOMMENDED: [1] X YES [2] NO — IF YES, TYPE OF SURGERY RECOMMENDED (STANDARD NOMENCLATURE) PRINCIPAL: Cataract Extraction, rt. eye — 08. PROC. CODE: 5611

IF NO, TYPE OF SURGERY DISCUSSED (STANDARD NOMENCLATURE) PRINCIPAL: — 09. PROC. CODE:

10. RECOMMENDED SITE OF SURGERY
[1] X HOSPITAL INPATIENT [2] HOSPITAL OUTPATIENT [3] DOCTOR'S OFFICE [4] OTHER

PERTINENT HISTORY SYMPTOMS AND PHYSICAL FINDINGS.

Pt. had cataract extraction left eye in Feb. 1979. She feels she has not done well since then, & wonders if she should have right eye done.

The above info. is from the patient. She does not want her F.O.P. to know of the

LIST OF LABORATORY X-RAY OR OTHER DIAGNOSTIC TESTS ORDERED

DESCRIPTION OF TEST	RESULT OF TEST	PROC. CODE
Consultation,		11.
		12.
		13.
		14.
		15.
		16.

NOTE: IF MORE THAN SIX TESTS, PLEASE LIST ON A SEPARATE SHEET — 17. ☐

NAME OF FIRST OPINION PHYSICIAN	OFFICE ADDRESS	
[illegible] M.D.	[illegible] Detroit Mich. 48202	

TELEPHONE NUMBER	18. TYPE OF PRACTICE	19. FORM COMPLETED BY:	DATE
[illegible]	[1] X SOLO [2] GROUP	[1] DOCTOR'S OFFICE MAILED [2] DOCTOR'S OFFICE TELEPHONED [3] X REFERRAL CENTER W/BENEFICIARY'S INPUT	03-28-80

NOTE: The authority for collecting the above information is contained in section 402(a) of the 1967 amendments to the Social Security Act, as amended by section 222(b) of the 1972 amendments to the Social Security Act: P.L. 92—603. Disclosure of such information is voluntary.

The information on this form will be used to aid consultants in evaluating the beneficiary's condition and to evaluate the impact of the program. If individuals do not provide the information, consultant opinions will lack background on the beneficiary which only the first opinion physician/surgeon can provide and evaluation will be impaired. However, nondisclosure will not affect the first opinion physician/surgeon.

2982-7 MAR 78

REFERRAL CENTER COPY

Blue Cross Blue Shield of Michigan

REFERRAL CENTER #J713
600 LAFAYETTE EAST, DETROIT, MICHIGAN 48226

MEDICARE SURGICAL SECOND OPINION PROGRAM (MSSOP)

CONSULTANT'S REPORT

01. H.I.B. NUMBER	02. OPINION	03. MSSOP NO.	BENEFICIARY'S NAME (LAST)	FIRST	M. CODE (INIT.)
[illegible]	1 [x] SECOND 2 [ ] THIRD	M00254	[illegible]	[illegible]	

BENEFICIARY'S ADDRESS (NUMBER) (STREET) CITY: HIGHLAND PARK APARTMENT NO.

04. COUNTY: WAYNE (82) 05. STATE: MICHIGAN 06. ZIP CODE: 48203

CONSULTANT'S DIAGNOSIS (STANDARD NOMENCLATURE): (1) Syringobulbia - L E (2) Traumatic senile cataract R eye 07. DX CODE: 3749

08. NEED FOR SURGERY: CONFIRMED [1]; NOT CONFIRMED [2] [X]

SURGICAL PROCEDURE RECOMMENDED BY CONSULTANT, IF SURGERY CONFIRMED (STANDARD NOMENCLATURE) 09. PROC CODE

10. RECOMMENDED LOCATION FOR SURGERY: [1] HOSPITAL INPATIENT [2] HOSPITAL OUTPATIENT [3] OFFICE [4] OTHER

11. IS SURGICAL PROCEDURE RECOMMENDED THE SAME AS RECOMMENDATION OF FIRST OPINION PHYSICIAN? [1] YES [2] NO [3] UNKNOWN

12. SURGERY NOT RECOMMENDED BECAUSE: (CHECK ALL PERTINENT BLOCKS) [1] [X] NO TREATMENT NECESSARY [2] NO PATHOLOGY FOUND

13. TRIAL OF MEDICAL TREATMENT INDICATED AS FOLLOWS: [3.1] MEDICATION [3.2] PHYSICAL THERAPY [3.3] OIET THERAPY [3.4] OTHER THERAPY (SPECIFY) [4] [X] COMPLICATING CONCURRENT CONDITION(S) [5] RE-EVALUATION INDICATED [6] FURTHER DIAGNOSTIC STUDIES (SPECIFY) [7] OTHER SPECIFY

4/25/80

CONSULTANT'S REMARKS FOR THE RECOMMENDED NEXT THERAPEUTIC STEP:

(1) Pt has an early syringobulbia with a 20/20 seeing eye with no surgery. (2) Her cataract operated eye is not comfortable and does not improve [illegible] Recommend surgery only if the good unoperated eye rapidly falls off due to the cataract - not the dystrophy.

14. LIST OF LABORATORY, X-RAY, OTHER DIAGNOSTIC TESTS PERFORMED WHEN APPLICABLE	DESCRIPTION OF TEST	RESULT OF TEST	PROCEDURE CODES
			14.
			15.
			16.
			17.
			18.

NOTE: IF MORE THAN SIX PROCEDURES, PLEASE LIST ON A SEPARATE SHEET. 19. [ ]

LOCATION AT WHICH LABORATORY, X-RAY, OR OTHER DIAGNOSTIC TESTS WERE PERFORMED

NAME	ADDRESS	CHECK BELOW
		20. [1] DR. OFFICE [2] HOSPITAL [3] INDEPENDENT
		21. [1] DR. OFFICE [2] HOSPITAL [3] INDEPENDENT
		22. [1] DR. OFFICE [2] HOSPITAL [3] INDEPENDENT

23. BY OBSERVATION, PLEASE STATE PATIENT'S RACE: [1] WHITE, NOT OF HISPANIC ORIGIN [2] [X] BLACK, NOT OF HISPANIC ORIGIN [3] HISPANIC [4] AMERICAN INDIAN OR ALASKAN NATIVE [5] ASIAN OR PACIFIC ISLANDER

24. REASON FOR ORDERING LABORATORY, X-RAY, OR OTHER DIAGNOSTIC TESTS: CHECK APPROPRIATE BOX: [1] DID NOT RECEIVE F.O.P. REPORTS [2] EXISTING REPORTS INCONCLUSIVE [3] NEEDED UPDATED RESULTS [4] NEEDED TO VERIFY EXISTING RESULTS [5] OTHER

SIGNATURE OF CONSULTANT [illegible]

25. DATE OF APPOINTMENT: 04/25/80

NOTE: The authority for collecting the above information is contained in section 402(a) of the 1967 amendments to the Social Security Act, as amended by section 222(b) of the 1972 amendments to the Social Security Act, P.L. 92-603. Disclosure of such information is voluntary. The information collected on this form will be used to evaluate the impact of the program. If individuals do not provide the information, their agreement as a participating consultant may be terminated with 30 days notice.

2980-1 MAR 78

Exhibit E.12

SAMPLE COMPARISON OF MEDICARE PROCEDURE CODING SYSTEMS

PROCEDURE: URETEROLITHOTOMY

Coding System					Service Description
ICD-9-CM	ICDA8	BC/BS of Michigan Part B	GHI Part B	BC/BS GNY Part B	
56.2					Ureterotomy Incision of ureter for: exploration reinsertion of ureteral stent removal of calculus Excludes: cutting of ureterovesical orifice (56.1) removal of calculus without incision (56.0) urinary diversion (56.51-56.79)
56.99					Other operations on ureter Other Excludes: removal of ureterostomy tube and ureteral catheter (97.62) ureteral catheterization (59.8)
	55.0				Ureterotomy Includes: incision with: exploration implanation of electronic stimulator removal of calculus ureterolithotomy Excludes: cutting of ureteroversical orifice (55.9) removal of calculus without incision (55.7) urinary diversion (55.2, 55.3), or anastomosis (55.5)
	55.9				Other operations on ureter Includes: cutting of ureterovesical orifice ligation Excludes: cystoscopy or ureteroscopy for exploration (other than calculus) (A4.6)
		3857(T)			Ureterolithotomy abdominal or retroperitoneal approach, upper 2/3
		3858(T)			Ureterolithotomy abdominal or retroperitoneal appraoch, lower 1/3 (below pelvic brim)
			3851		Ureterotomy with or without lithotomy
				3857	Ureterolithotomy, abdominal or retroperitoneal approach

Exhibit E.13

EXAMPLE OF SURGERY OUTCOME CODING SHEET

---------- HIC=12[illegible] CONTACT=79 03 30 FOSSURG=92.1 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8254	YES	APPENDECTOMY (I.P.)	B	BCB	1054	79 04 03	3261 12101.
8255	YES	EXPLORATORY LAPAROTOMY/EXPLORATORY CELIOTOMY	B	BCB	1054	79 04 03	3571

---------- HIC=12[illegible] CONTACT=78 11 14 FOSSURG=.47 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8312	YES	WITH BIOPSY OR POLYPECTOMY	B	BCB	0630	78 12 05	6543 12001.
8313	YES	FIBEROPTIC COLONOSCOPY, COMPLETE (TO CECUM)	B	BCB	0630	78 12 06	6547
862	NO		B	GHI	0630	79 04 24	0125 0.....
8314	YES	WITH BIOPSY OR POLYPECTOMY	B	BCB	0630	79 06 26	6543 2.....
8315	YES	FIBEROPTIC COLONSCOPY, PARTIAL (OVER 60CM) WITH BIOPSY	B	BCB	0630	79 06 28	6545
8316	YES	FIBEROPTIC COLONOSCOPY, COMPLETE (TO CECUM) WITH BIOPSY	B	BCB	0630	79 06 28	6548
863	NO		B	GHI	0630	79 08 31	0125

---------- HIC=125[illegible] CONTACT=79 04 17 FOSSURG=81.9 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8522	YES	SEE LIST----EXCISION AND SUTURE REPAIR--TRUNK, ARMS, LEGS	B	BCB	1549	79 05 31	0175 1B1BB.
8523	YES	NOT OTHERWISE CLASSIFIED FOR MUSCULOSKELETAL SYSTEM	B	BCB	1549	79 05 31	1B49
8524	NO	CYSTOSCOPY, DIAGNOSTIC, INITIAL	B	BCB	1549	79 12 06	3931 0.....
8525	YES	PROSTATECTOMY. SUPRAPUBIC OR RETROPUBIC, ONE OR TWO STAGES	B	BCB	1549	79 12 14	4316 0.....

---------- HIC=1[illegible] CONTACT=79 10 26 FOSSURG=87.6 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8681	NO	ARTHROCENTESIS-PUNCTURE FOR ASPIRATION OF JOINT (I.P.)	B	BCB	27B9	81 02 04	1046 7....1

---------- HIC=1[illegible] CONTACT=78 11 06 FOSSURG=39.1 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8850	YES		B	BCB	0729	79 01 05	4551 101...
8851	YES	TRANSLUMBAR AORTAGRAM	B	BCB	0729	79 08 23	2435 0.....

---------- HIC=[illegible] CONTACT=80 04 02 FOSSURG=20.1 (ICOB) IN2947=YES ----------

OBS	BHOSP	PROCEDURE DESCRIPTION	TYPE	SRC	HARNUM	SERVDATE	PROC CODES
8964	YES	REPAIR OF RETINAL DETACHMENT BY SCLERAL BUCKLING WITH OR WITHOUT PROCEDURE 5635, ONE OR MORE STAGES, LEFT EYE	B	BCB	3146	80 06 13	5640 0.....
817	YES	REPAIR OF RETINAL DETACHMENT BY SCLERAL BUCKLING WITH OR WITHOUT PROCEDURE 5635, ONE OR MORE STAGES, LEFT EYE	B	BCB	3146	80 06 13	5640 0.....

Exhibit E.14

Abt Associates Inc.
55 Wheeler Street
Cambridge, MA 02138

OMB Number: 09380149
Approval Expires: December, 1982

A STUDY OF THE IMPACT OF SECOND OPINIONS FOR ELECTIVE SURGERY

MEDICARE BENEFICIARY TELEPHONE SURVEY (NEW YORK)

Label:

1-8 /
9-10/01

Final Status Code:

_____ 11-12/

Date of Final Status:

____/____/____
13-18/

Label Beneficiary's New Address:

Street _____

City/state _____

Zip code _____

Telephone No. (203) _____

Respondent Name

_____

Interim Status:	
Busy/no answer	01
Initial refusal	02
Breakoff	03
Language barrier	04
Label beneficiary moved	05
Callback--scheduled	06
Callback--unscheduled	07
Other	08

Final Status:	
Complete/eligible for sample	10
Complete/ineligible for sample (Control Card Q.2 and Q.3 = NO)	11
Label beneficiary moved (not locatable)	12
Label beneficiary institutionalized	13
Label beneficiary deceased	14
Final refusal	15
Breakoff/Partial	16
Maximum attempts	17
Language barrier	18
Out of sample	19
Non-working number	20
Other	21

CALL RECORD

Call #	Date	Time	Int. Init.	Status Code	Comments

INTRODUCTION

(ASK TO SPEAK TO THE BENEFICIARY LISTED ON THE LABEL. IF TEMPORARILY UNAVAILABLE, ASK FOR ANY OTHER ADULT IN HOUSEHOLD. IF LABEL BENEFICIARY HAS MOVED, TRY TO OBTAIN NEW PHONE NUMBER AND ADDRESS. IF DECEASED OR INSTITUTIONALIZED, TERMINATE INTERVIEW.)

Hello, my name is _____ from Abt Associates. We are conducting a study of second surgical opinion programs for the U.S. Department of Health and Human Services. I'd like to ask you just a few questions. Your cooperation is entirely voluntary, but your participation is important. All information you give will be kept in strict confidence and will never be reported in any way that allows you to be individually identified.

(IF RESPONDENT WANTS TO KNOW HOW WE GOT HIS/HER NAME:) The federal government has provided us with names of people covered by Medicare.

First, I would like to mention that my questions refer only to persons in your household who are at least 65 years of age and are covered by Medicare.

---

1. In total, how many persons in your household does this include? (MUST BE AT LEAST ONE--LABEL BENEFICIARY)

_____
MEDICARE PERSONS

---

2. Since January 1980, has anyone covered by Medicare had an operation that was not for an emergency or for diagnostic purposes only? For example: cataract surgery, a prostate operation, a gall bladder operation, a hernia operation or a varicose vein operation.

YES (CONTINUE WITH Q. 1 ON MAIN QUESTIONNAIRE) 1

NO (ASK Q. 3) 2

---

3. Since January 1980, has anyone covered by Medicare discussed having surgery with a doctor but not had the operation? Again, we are interested only in surgery that is not for an emergency or for diagnostic purposes.

YES (CONTINUE WITH Q. 8 ON MAIN QUESTIONNAIRE) 1

NO (THANK RESPONDENT AND TERMINATE) . 2

OMB Number: 09380149
Approval Expires: December 1982

MEDICARE BENEFICIARY TELEPHONE SURVEY (NEW YORK) |CARD 01|
MAIN QUESTIONNAIRE

ID # _____ 1-8/
9-10/01
11-12=BLNK

		|CARD 01 (Con't)| OPERATION #1	|CARD 01 (Con't)| OPERATION #2	|CARD 02| |9-10/02| OPERATION #3
1.	May I have the name, age and sex of the person who had the operation? (IF MORE THAN ONE OPERATION, ASK Q.s 1-5 ABOUT MOST RECENT ONE FIRST. THEN REPEAT FOR NEXT ONE ETC.)	Name: _____ Age: ___ yrs. 13-14/ Sex: M . . . 1 F . . . 2 15/	Name: _____ Age: ___ yrs. 41-42/ Sex: M . . . 1 F . . . 2 43/	Name: _____ Age: ___ yrs. 11-12/ Sex: M . . . 1 F . . . 2 13/
2.	What is the name of the operation (PERSON) had? (PROBE: What part of the body was involved?)	16-20/	44-48/	14-18/
3.	What was the medical condition or illness that was treated by this operation?	21-26/	49-54/	19-24/
3a.	The first time the operation was talked about, did the doctor recommend the operation for (PERSON) or just discuss the operation without actually recommending it?	Recommend . . 1 Discuss . . . 2 Don't know . 8	Recommend . . 1 Discuss . . . 2 Don't know . 8	Recommend . . 1 Discuss . . . 2 Don't know . 8
4.	In what month and year did (PERSON) have this operation?	___/___ MO YR 27-30/	___/___ MO YR 55-58/	___/___ MO YR 25-28/
5.	(IF PERSON IS NOT LABEL BENEFICIARY, ASK:) What is (PERSON'S) Medicare claim number?	_____ 31-40/	_____ 59-68/	_____ 29-38/

6. Did (PERSON) have any other operation or did anyone else in your household covered by Medicare have an operation since January 1980?

YES (REPEAT Q.s 1-5 FOR NEXT OPERATION). 1

NO (ASK Q. 7) 2 39/

7. Since January 1980, has anyone in your household covered by Medicare discussed having surgery with a doctor but not had the operation? Again, we are interested only in surgery that is not for an emergency or for diagnostic purposes.

YES 1

NO (SKIP TO CLOSING) 2 40/
41=BLNK

ASK QUESTIONS 9-13 FOR EACH OPERATION COUNTED IN Q. 8.

		CARD 02 (Con't) OPERATION #1	CARD 03 9-10/03 OPERATION #2	CARD 03 (Con't) OPERATION #3
8.	May I have the name, age and sex of the person for whom surgery was considered?	Name: _____ Age: ___ yrs. 42-43/ Sex: M . . . 1 F . . . 2 44/	Name: _____ Age: ___ yrs. 11-12/ Sex: M . . . 1 F . . . 2 13/	Name: _____ Age: ___ yrs. 42-43/ Sex: M . . . 1 F . . . 2 44/
9.	What is the name of the operation that was discussed? (PROBE: What part of the body was involved?)	45-49/	14-18/	45-49/
10.	What is the medical condition or illness that would be treated by this operation?	50-55/	19-24/	50-55/
11.	The first time surgery was talked about, did the doctor recommend the operation for (PERSON) or just discuss the operation without actually recommending it?	Recommend . . 1 Discuss . . . 2 Don't know . 8 56/	Recommend . . 1 Discuss . . . 2 Don't know . 8 25/	Recommend . . 1 Discuss . . . 2 Don't know . 8 56/
12.	In what month and year was surgery most recently discussed with any of (PERSON'S) doctors?	___/___ MO. YR. 57-60/	___/___ MO. YR. 26-29/	___/___ MO. YR. 57-60/
13.	(IF PERSON IS NOT LABEL BENEFICIARY, ASK:) What is (PERSON'S) Medicare claim number?	_____ 61-70/	_____ 30-41/	_____ 61-70/

14. Did (PERSON) discuss having any other operation or did anyone else in your household covered by Medicare discuss having an operation since January 1980?

YES (REPEAT Q.s 8-13 FOR NEXT OPERATION) . 1
NO (READ CLOSING STATEMENT) 2 71/

CLOSING:

IF ANY SURGERY PERFORMED OR DISCUSSED, SAY:

We may be getting in touch with (PERSON WHO HAD OR WAS RECOMMENDED FOR SURGERY) in a few months to find out more details about the decision to have or not have surgery. If so, we'll send a letter before we call. Can I confirm your address to make sure I have it correct?

READ TO ALL:

Thank you very much for your cooperation. We appreciate your participation in this study.

(TRANSFER FOLLOWING INFORMATION FROM CONTROL CARD-Q.1)

Medicare Persons in HH: _____ 72-73/

DATE ___ /___/___ 1-6/
mo day year

NSSOP LOG

OMB # 066-S79014
Approval Expires: February 1981

A. Is the caller seeking a second opinion? Yes ( ) 1 → If Yes, answer B No ( ) 2 → If No, skip to C. 13/

B. Check location: (County of residence: _____) Has caller reached the appropriate list holder? Yes ( ) 1 Skip to D 14/
No ( ) 2 Answer C

7-12/

C. Was the call: *(Check one if applicable)*

For general information about the NSSOP	( ) 1	15/
Reached wrong list holder	( ) 2	
Wrong number	( ) 3	
Other *(Specify)* _____	( ) 4	
_____		16/
		17/

STOP

D. **PLEASE READ TO THE CALLER** I would like to ask you a few questions. Answering them is completely voluntary. Any information provided by you will be kept totally confidential. Collecting some minimal information will be necessary in order to give you an appropriate referral. Some of the information requested will be used to evaluate the effectiveness of the Second Opinion Program.

Patient Information:

1. Are you the patient? Yes ( ) 1 No ( ) 2 18/

2. What is (your/the patient's) age? _____ 19-20/

   What is (your/the patient's) sex? Male ( ) 1 Female ( ) 2 21/

3. What is (your/the patient's) primary diagnosis?

   _____ 22-26/

4. What is the procedure recommended or discussed?

   _____ 27-30/

5. Did (your/their) physician: *(Read whole list and check one)*

Recommend procedure	( ) 1	31/
Discourage procedure	( ) 2	
Discuss but neither recommend nor discourage procedure	( ) 3	

6. When did this visit occur? ___ /___ /___ 32-37/
   mo day year

7. What is the specialty of (your/their) physician? _____ 38-40/

8.A. How did you first hear about the program? *(Circle only ONE in Part B)* 41-42/

B. In what other ways have you heard about the availability of the Second Opinion Program? *(Do not read list. Check all that apply.)*

Proposing surgeon	( ) 1	TV commercial, spot	( ) 7	43-44/
Regular physician	( ) 2	TV program	( ) 8	45-46/
Consumer organization	( ) 3	Radio commercial	( ) 9	47-48/
Word of mouth (friend, relative, etc.)	( ) 4	Radio program	( ) 10	49-50/
		Brochure	( ) 11	51-52/
National Hot-Line	( ) 5	Newspaper	( ) 12	53-54/
Magazine	( ) 6	Other *(Specify)*	( ) 13	55-56/
		_____		57-58/
		_____		

9. What type of insurance (do you/does the patient) have? *(Check ALL that apply)*

Medicare (Title 18) Part A—hospital insurance	1 ( ) 59/	CHAMPUS	1 ( ) 63/
Medicare (Title 18) Part B—medical insurance	2 ( ) 60/	CHAMP/VA	2 ( ) 64/
Medicaid (Title 19)	3 ( ) 61/	Other (Blue Cross, commercial, etc.)	3 ( ) 65/
Title 5	4 ( ) 62/	None	4 ( ) 66/

10. May someone contact (you/the patient) a month from now to collect some follow-up information to help evaluate this Second Opinion Program?
    Yes ( ) 1 No ( ) 2 If yes, collect the following: 67/

    Patient's name _____

    Patient's address _____

    City _____ State _____ Zip Code _____

    Telephone No. ( ) _____

11. Was the caller given consultant names?
    Yes ( ) 1 List _____ 68/

    _____

    _____

    No ( ) 2 Why not? _____ 69-70/

    _____ 71-72/

    _____

    73-77/

Abt Associates Inc.
55 Wheeler Street
Cambridge, MA 02138

Exhibit E.16

OMB Number 09380131
Approval Expires 12/82

NATIONAL SECOND SURGICAL OPINION PROGRAM

CARD 01
7-8/01

PATIENT FOLLOWUP QUESTIONNAIRE

ID # _____ 1-6/

Final Outcome

Complete 01

Breakoff 02

Refusal 03

Termination at Q.1 04

Respondent Unavailable for Study Duration 05

Final No Contact 06

Never Considered Surgery . . 07

Final Other 08 9-10/

CALL RECORD

Attempt #	Date	Time	Interviewer	Outcome

INTRODUCTION

INTERVIEWER: BEFORE DIALING TELEPHONE NUMBER IN Q.10 OF LOG, CHECK Qs.1 AND 2 OF LOG TO DETERMINE THE APPROPRIATE INTRODUCTION. (I, II or III BELOW).

I. IF THE CALLER IS THE PATIENT. READ:
Hello, my name is _____. May I speak with (LOG NAME - Q.10)?

II. IF THE CALLER IS NOT THE PATIENT AND THE PATIENT IS UNDER 18, READ:
Hello, my name is _____. May I speak with [MRS./MR. (CHILD'S LAST NAME) OR ADULT CALLER LISTED IN Q.10 NEXT TO PATIENT'S NAME]?

III. IF THE CALLER IS NOT THE PATIENT AND THE PATIENT IS 18 OR OLDER, READ:
Hello, my name is _____. I'm calling from Abt Associates in connection with a study to evaluate the National Second Surgical Opinion Program for the Health Care Financing Administration of the U.S. Department of Health and Human Services. On (LOG DATE) someone called (LIST HOLDER) to get information about obtaining a second surgical opinion. I would like to speak to the person in whose behalf the call was made, that is the person who was considering having the operation. (IF NO ONE AWARE OF CALL, CIRCLE CODE "3" ON Q.1 AND TERMINATE.)

APPROPRIATE RESPONDENT: (REPEAT FIRST PARAGRAPH IF NECESSARY.)

(Hello, my name is _____. I'm calling from Abt Associates in connection with a study to evaluate the National Second Surgical Opinion Program for the Health Care Financing Administration of the U.S. Department of Health and Human Services.)

On (LOG DATE) (you/or someone on your behalf), called (LIST HOLDER) to get information about obtaining a second surgical opinion. At that time (you agreed to/the caller agreed that you might) be contacted for some follow-up information. I would like to ask you a few questions about what happened after the call to (LIST HOLDER). Answering these questions is entirely voluntary, but your cooperation is needed to help us determine how well the national program is working. All information you give will be held in strict confidence and will never be reported in any way that allows you to be individually identified.

(IF RESPONDENT WANTS TO KNOW MORE ABOUT THE NATIONAL SECOND SURGICAL OPINION PROGRAM, READ THE FOLLOWING:)

The National Program was begun by the U.S. Department of Health and Human Services in September 1978 to encourage people who have been recommended for surgery by a physician to get a second opinion from another physician. The 150 or so organizations which form the national program give the persons who call them the names of physicians who will provide a second opinion. (LIST HOLDER) is one of the organizations in the national program.

TIME BEGAN: _____ AM PM

| CARD 01 |

1. INTERVIEWER: CIRCLE APPROPRIATE CODE BELOW:

RESPONDENT IS CALLER 1

RESPONDENT IS NOT CALLER (SKIP TO Q. 6) 2

RESPONDENT/PATIENT NOT AWARE OF CALL (TERMINATE INTERVIEW) 3 11/

| COLS. 12-20/BLANK |

2. How did you first hear about the National Second Surgical Opinion Program? Was it from. . . (DO NOT READ LIST. CODE ONLY ONE RESPONSE.)

YOUR DOCTOR 01

A FRIEND 02

A RELATIVE 03

YOUR HEALTH INSURANCE AGENT . . . 04

A RADIO ANNOUNCEMENT 05

A TELEVISION ANNOUNCEMENT 06

A NEWSPAPER ARTICLE 07

A MAGAZINE ARTICLE 08

SOME OTHER WAY (SPECIFY) 09

_____ 21-22/

---

3. Did you call a toll-free "800" number to get the (LIST HOLDER'S) phone number?

YES (ASK A) 1

NO (ASK B) 2 23/

| CARD 01 |

IF YES, ASK:

A. Where did you first learn about this toll-free "800" number?
(DO NOT READ LIST. CODE ONLY ONE RESPONSE.)

PHONE BOOK/DIRECTORY ASSISTANCE 01
A DOCTOR 02
FRIEND OR RELATIVE 03
INSURANCE AGENT 04
TELEVISION ANNOUNCEMENT 05
RADIO ANNOUNCEMENT 06
NEWSPAPER ADVERTISEMENT 07
NEWSPAPER ARTICLE 08
MAGAZINE ADVERTISEMENT 09
MAGAZINE ARTICLE 10
OTHER (SPECIFY) _____ 11
MEDICARE 12 24-25/

| COLS. 26-29/BLANK |

IF NO, ASK:

B. Where did you get the (LIST HOLDER'S) number?
(DO NOT READ LIST. CODE ONLY ONE RESPONSE.)

PHONE BOOK/DIRECTORY ASSISTANCE 01
A DOCTOR 02
FRIEND OR RELATIVE 03
INSURANCE AGENT 04
TELEVISION ANNOUNCEMENT 05
RADIO ANNOUNCEMENT 06
NEWSPAPER ADVERTISEMENT 07
NEWSPAPER ARTICLE 08
MAGAZINE ADVERTISEMENT 09
MAGAZINE ARTICLE 10
OTHER (SPECIFY) _____ 11
MEDICARE 12 30-31/

| COLS. 32-35/BLANK |

4. When you called (LIST HOLDER) did you have any trouble getting through to talk with someone who could give you the names of doctors to see for another opinion?

YES 1

NO (SKIP TO Q.5) 2 36/

IF YES, ASK:

A. What kind of trouble did you have? (READ LIST AND CODE YES OR NO FOR EACH CATEGORY.)

	YES	NO	
Was the line busy?	1	2	37/
Was there no answer at all?	3	4	38/
Was it hard to get to speak with a person who could actually give you doctors' names?	1	2	39/
Any other problems? (PROBE AND SPECIFY.)	3	4	40/

_____

_____

_____ 41-42/

_____ 43-44/

---

5. When you talked to the person at (LIST HOLDER). . . (READ ITEMS AND CODE YES OR NO FOR EACH.)

	YES	NO	
Was he or she polite and helpful?	1	2	45/
Did the person understand what you were asking for? . . .	3	4	46/
Did you understand the questions the person asked?	1	2	47/
Did you understand the information the person gave you? .	3	4	48/
Did you have any (other) problems? (ASK A.)	1	2	49/

IF HAD PROBLEMS, ASK:

A. What (other) problems did you have?

50-51/
52-53/

| CARD 01 |

IN Q. 6, READ "YOU" IF RESPONDENT WAS THE CALLER; READ "THE PERSON WHO CALLED" IF NOT.

6. Just to help me ask the next few questions, I need to know the names of the doctors you've seen. At the time of the call to (LIST HOLDER), (you/ the person who called) mentioned that you had seen a doctor on (DATE OF VISIT--ITEM #6 OF LOG). May I have that doctor's name, please.

_____ 54/
NAME OF LOG DOCTOR

---

7. How many times had you seen (LOG DOCTOR) before your (LOG DATE-ITEM #6) visit, including visits for other conditions or illness and general checkups? (DO NOT READ LIST. CODE ONLY ONE RESPONSE.)

NEVER (LOG VISIT WAS FIRST VISIT)	1
1 PRIOR VISIT ONLY	2
2-4 PRIOR VISITS	3
5-10 PRIOR VISITS	4
11 OR MORE PRIOR VISITS	5 55/

| COLS. 56-59/ BLANK |

---

8. Does (LOG DOCTOR) personally perform (PROCEDURE--ITEM #4 OF LOG)?

YES	1
NO	2 60/

---

9. When you saw (LOG DOCTOR) on (DATE OF VISIT--LOG ITEM #6), what was (his/her) diagnosis--what did (he/she) say was wrong?

61-66/
67-72/

| CARD 02 |
| 7-8/02 |

10. At that time did (he/she). . . (READ LIST AND CODE ONE.)

Recommend surgery to treat your (CONDITION)? (ASK Q. B&C) 1

Discourage you from having surgery? (ASK Q. D) 2

Discuss surgery without either recommending or discouraging it? (SKIP TO Q. 11) 3

(DO NOT READ) DID NOT DISCUSS SURGERY (ASK Q. A) 4 9/

A. Did you discuss surgery with any other doctor(s) before you called the Second Opinion Program?

YES (SKIP TO Q. 12) 1

NO (TERMINATE INTERVIEW) 2 10/

IF RECOMMENDED SURGERY, ASK:

B. What operation did (LOG DOCTOR) recommend? _____ 11-15/ 16-20/
NAME OF OPERATION

C. When did (LOG DOCTOR) say you should have the operation? Was it. . . (READ LIST AND CODE ONE.)

As soon as possible? 1

Within one month? 2

Within three months? 3

Within six months? 4

Within twelve months? 5

(DO NOT READ) THE DOCTOR DID NOT SAY WHEN YOU SHOULD HAVE THE OPERATION. 6 21/

** SKIP TO Q. 11 **

IF DISCOURAGED SURGERY, ASK:

D. Why did (LOG DOCTOR) say that you should not have an operation? Was it because. . . (READ LIST AND CODE YES OR NO FOR EACH.)

	YES	NO	
(He/She) didn't think you actually had (CONDITION)?	1	2	22/
(He/She) thought that you had (CONDITION), but it wasn't bad enough then for you to have an operation?	3	4	23/
(He/She) thought that you should try other kinds of treatment before you decided to have an operation?	1	2	24/
(He/She) thought that because of other health problems you shouldn't have an operation?	3	4	25/
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one sometime in the future?	1	2	26/
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)?	3	4	27/
Any other reasons? (SPECIFY) _____	1	2	28/
_____			29-30/
_____			31-32/
(DO NOT READ) THE DOCTOR DIDN'T SAY WHY	3		33/

11. Did (LOG DOCTOR) recommend any other kinds of treatment such as medicines, equipment or appliances, or diet therapy?

YES	1	
NO (SKIP TO Q. 12)	2	34/

IF YES, ASK:

A. What other kinds of treatment did s(he) recommend? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINES OR DRUGS.	1	35/
PHYSICAL THERAPY	2	36/
EQUIPMENT OR APPLIANCES (E.G., TRUSS, EYEGLASSES, PESSARY, BRACES, PROSTHESIS). .	3	37/
DIET THERAPY	4	38/
OTHER TREATMENT (SPECIFY)	1	39.
_____		40-41/
_____		42-43/

CARD 02

12. Were you sent to (LOG DOCTOR) by another doctor whom you had seen about your (CONDITION)?

YES 1

NO (SKIP TO Q. 20) 2 44/

---

13. May I have the name of the doctor who sent you to (LOG DOCTOR)?

_____ 45/

NAME OF PRE-LOG DOCTOR

---

14. What was the date of your visit to (PRE-LOG DOCTOR) when he suggested you see (LOG DOCTOR)?

_____ (Month/Year) 46-49/

---

15. How many times had you seen (PRE-LOG DOCTOR) before your (DATE IN Q.14) visit, including visits for other conditions or illnesses and general check-ups? (DO NOT READ LIST. CODE ONLY ONE RESPONSE.)

NEVER (Q.14 VISIT WAS FIRST VISIT) 1

1 PRIOR VISIT ONLY 2

2-4 PRIOR VISITS 3

5-10 PRIOR VISITS 4

11 OR MORE PRIOR VISITS 5 50/

COLS. 51-53/ BLANK

---

16. Does (PRE-LOG DOCTOR) personally perform (PROCEDURES--ITEM #4 OF LOG)?

YES 1

NO 2 54/

---

17. When you saw (PRE-LOG DOCTOR) in (DATE OF VISIT IN Q. 14), what was his/her diagnosis--what did (he/she) say was wrong?

55-60/
61-66/

| CARD 02 |

18. At the time of your (DATE IN Q.14) visit, did (PRE-LOG DOCTOR). . . (READ LIST AND CODE ONE.)

Recommend surgery to treat your (CONDITION)? (ASK Q. A&B)	1	
Discourage you from having surgery? (ASK Q. C)	2	
Discuss surgery without either recommending or discouraging it? (SKIP TO Q. 19)	3	
(DO NOT READ) PRE-LOG DOCTOR DID NOT DISCUSS SURGERY (SKIP TO Q. 20) . .	4	67/

IF RECOMMENDED SURGERY, ASK:

A. What operation did (PRE-LOG DOCTOR) recommend? _____ 68-72/ 73-77/
NAME OF OPERATION

B. When did (PRE-LOG DOCTOR) say you should have the operation? Was it. . . (READ LIST AND CODE ONE.)

As soon as possible?	1	
Within one month?	2	
Within three months?	3	
Within six months?	4	
Within twelve months?	5	
(DO NOT READ) THE DOCTOR DID NOT SAY WHEN YOU SHOULD HAVE THE OPERATION . . .	6	78/

** SKIP TO Q. 19 **

IF DISCOURAGED SURGERY, ASK:

C. Why did (PRE-LOG DOCTOR) say that you should not have an operation? Was it because. . . (READ LIST AND CODE YES OR NO FOR EACH.)

	YES	NO	
(He/She) didn't think you actually had (CONDITION)?	1	2	9/
(He/She) thought that you had (CONDITION), but it wasn't bad enough then for you to have an operation?	3	4	10/
(He/She) thought that you should try other kinds of treatment before you decided to have an operation?	1	2	11/
(He/She) thought that because of other health problems you shouldn't have an operation?	3	4	12/
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one sometime in the future?	1	2	13/
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)?	3	4	14/
Any other reasons? (SPECIFY) _____	1	2	15/
_____			16-17/
			18-19/
(DO NOT READ) THE DOCTOR DIDN'T SAY WHY	3		20/

19. Did (PRE-LOG DOCTOR) recommend any other kinds of treatment such as medicines, equipment or appliances, or diet therapy?

YES	1	
NO (SKIP TO Q. 20)	2	21/

IF YES, ASK:

A. What other kinds of treatment did s(he) recommend? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINES OR DRUGS.	1	22/
PHYSICAL THERAPY	2	23/
EQUIPMENT OR APPLIANCES (E.G., TRUSS, EYEGLASSES, PESSARY, BRACES, PROSTHESIS). .	3	24/
DIET THERAPY	4	25/
OTHER TREATMENT (SPECIFY)	1	26/
_____		27-28/
_____		29-30/

ASK ALL:

20. Did (LOG DOCTOR) ask you to see another doctor?

YES 1

NO (SKIP TO Q. 28) 2 31/

---

21. Did you actually see that doctor?

YES 1

NO (SKIP TO Q. 28) 2 32/

---

22. May I have the name of the doctor (LOG DOCTOR) sent you to see?

_____ 33/

NAME OF POST-LOG DOCTOR

---

23. When did you see (POST-LOG DOCTOR)?

_____ (Month/Year) 34-37/

---

24. Does (POST-LOG DOCTOR) personally perform (PROCEDURES--ITEM #4 OF LOG)?

YES 1

NO 2 38/

---

25. When you saw (POST-LOG DOCTOR) in (DATE OF VISIT IN Q. 23), what was his/her diagnosis--what did (he/she) say was wrong?

39-44/
45-50/

| CARD 03 |

26. At the time of your (DATE IN Q.23) visit, did (POST-LOG DOCTOR). . . (READ LIST AND CODE ONE.)

Recommend surgery to treat your (CONDITION)? (ASK Q. A&B)	1	
Discourage you from having surgery? (ASK Q. C)	2	
Discuss surgery without either recommending or discouraging it? (SKIP TO Q. 27)	3	51/

IF RECOMMENDED SURGERY, ASK:

A. What operation did (POST-LOG DOCTOR) recommend? _____ 52-56/ 57-61/
NAME OF OPERATION

B. When did (POST-LOG DOCTOR) say you should have the operation? Was it. . . (READ LIST AND CODE ONE.)

As soon as possible?	1	
Within one month?	2	
Within three months?	3	
Within six months?	4	
Within twelve months?	5	
(DO NOT READ) THE DOCTOR DID NOT SAY WHEN YOU SHOULD HAVE THE OPERATION	6	62/

** SKIP TO Q. 27 **

| CARDS 03-04 |

IF DISCOURAGED SURGERY, ASK:

C. Why did (POST-LOG DOCTOR) say that you should not have an operation? Was it because. . . (READ LIST AND CODE YES OR NO FOR EACH.)

	YES	NO	
(He/She) didn't think you actually had (CONDITION)?	1	2	63/
(He/She) thought that you had (CONDITION), but it wasn't bad enough then for you to have an operation?	3	4	64/
(He/She) thought that you should try other kinds of treatment before you decided to have an operation?	1	2	65/
(He/She) thought that because of other health problems you shouldn't have an operation?	3	4	66/
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one sometime in the future?	1	2	67/
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)?	3	4	68/
Any other reasons? (SPECIFY) _____	1	2	69/ 70-71/ 72-73/
(DO NOT READ) THE DOCTOR DIDN'T SAY WHY	3		74/

| CARD 04 |
| 7-8/04 |

27. Did (POST-LOG DOCTOR) recommend any other kinds of treatment such as medicines, equipment or appliances, or diet therapy?

YES	1	
NO (SKIP TO Q. 28)	2	9/

IF YES, ASK:

A. What other kinds of treatment did s(he) recommend? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINES OR DRUGS.	1	10/
PHYSICAL THERAPY	2	11/
EQUIPMENT OR APPLIANCES (E.G., TRUSS, EYEGLASSES, PESSARY, BRACES, PROSTHESIS). .	3	12/
DIET THERAPY	4	13/
OTHER TREATMENT (SPECIFY)	1	14/
_____		15-16/
_____		17-18/

CARD 04

28. When the call to the (LIST HOLDER) was made, how many doctors' names (were you/was the caller) given to choose among for a second opinion? (IF NONE, RECORD "00" ON LINE AND SKIP TO Q.30.)

_____ # DOCTORS 19-20/

21/BLANK

---

29. Did you see any of the doctors suggested by the (LIST HOLDER)? (IF NECESSARY, READ LIST OF DOCTORS FROM LOG.)

YES (SKIP TO Q. 31) 1

NO 2 22/

A. Did you try to make an appointment to see any of these doctors?

YES 1

NO (SKIP TO Q. 30) 2 23/

B. Did you have any trouble making an appointment to see any of these doctors?

YES 1

NO (SKIP TO Q. 30) 2 24/

C. What kind of trouble? Was it. . . (READ ITEMS AND CODE YES OR NO FOR EACH.)

	YES	NO	
Difficult to get to see the doctor as soon as you wanted to?	1	2	25/
Hard to find a convenient day or time when the doctor would see you?	3	4	26/
Hard to find a doctor you could easily travel to see? . .	1	2	27/
Something else? (SPECIFY)	3	4	28/

_____ 29-30/

_____ 31-32/

---

30. Did you see any other doctor for a second opinion?

YES (SKIP TO Q. 31) 1

NO 2 33/

IF NO, ASK:

A. Why did you decide not to see a doctor for a second opinion? Was it because. . . (READ LIST AND CODE YES OR NO FOR EACH ITEM. THEN PROBE FOR OTHER REASONS.)

	YES	NO	
You had reached a final decision about surgery?	1	2	34/
You had a transportation problem?	3	4	35/
You were too busy and couldn't find the time?	1	2	36/
You decided that it would cost too much to get a second opinion?	3	4	37/
Other? (SPECIFY) _____	3	4	38/
_____			39-40/
			41-42/

- IF THE RESPONDENT HAD A SECOND OPINION READ:
  Please answer my next questions in terms of what your feelings and experiences were before you got a second opinion.

- IF NO SECOND OPINION, READ:
  Please answer my next questions in terms of what your feelings and experiences were before you decided whether or not to have surgery.

ASK ALL:

31. In your opinion, how thorough an examination of your (CONDITION) did you get from the doctor(s) you saw (before getting a second opinion)? Would you say it was. . . (READ CATEGORIES. CODE ONLY ONE RESPONSE.)

Very thorough? 1

Somewhat thorough? 2

Not too thorough? 3

Not thorough at all? 4 43/

32. How complete an explanation of your (CONDITION) did you get from the doctor(s) you saw (before getting a second opinion)? Would you say it was. . . (READ CATEGORIES. CODE ONLY ONE RESPONSE.)

Very complete?	1	
Somewhat complete?	2	
Not too complete?	3	
Not complete at all?	4	44/

---

33. How adequate was the amount of time your doctor(s) spent discussing treatments other than surgery (before getting a second opinion)? Would you say it was. . . (READ CATEGORIES. CODE ONLY ONE RESPONSE.)

Very adequate?	1	
Somewhat adequate?	2	
Not too adequate?	3	
Not adequate at all?	4	45/

---

34. (Before you got the second opinion), how useful did you think it was to get a second opinion before deciding about surgery? Would you have said it was. . . (READ CATEGORIES. CODE ONLY ONE RESPONSE.)

Very useful?.	1	
Somewhat useful?	2	
Not too useful?	3	
Not useful at all?	4	46/

---

35. Had (any of) your doctor(s) suggested you see another doctor for an independent second opinion before deciding about surgery--not counting any doctors (he/she/they) specifically sent you to?

YES	1	
NO	2	47/

---

36. Had any friends or family members suggested you see another doctor for a second opinion before deciding about surgery?

YES	1	
NO	2	48/

CARD 04

37. Had you read any newspaper or magazine articles saying one should get a second opinion?

YES 1

NO 2 49/

---

38. Had you seen any radio or television announcements saying one should get a second opinion?

YES 1

NO 2 50/

---

39. In your opinion, did you think (any of) your doctor(s) might be offended if you got a second opinion?

YES 1

NO 2 51/

IF NO SECOND OPINION DOCTOR (I.E., "NO" TO Qs. 29 AND 30, SKIP TO Q. 48.

40. Now, may I have the name of the doctor you saw for a second opinion? (IF RESPONDENT OBTAINED MORE THAN ONE SECOND OPINION, RECORD THE NAME OF THE FIRST SECOND-OPINION DOCTOR SEEN.)

_____ 52/

NAME OF SECOND OPINION DOCTOR

---

41. What was the date of your visit to (SECOND OPINION DOCTOR)? (IF MORE THAN ONE VISIT, DATE OF VISIT IN WHICH OPINION WAS GIVEN.)

_____ (Month/Year) 53-56/

---

42. Does (SECOND OPINION DOCTOR) personally perform (PROCEDURES--ITEM #4 OF LOG)?

YES 1

NO 2 57/

---

43. When you saw (SECOND OPINION DOCTOR) in (DATE OF VISIT IN Q. 41), what was his/her diagnosis--what did (he/she) say was wrong?

58-63/
64-69/

---

44. At the time of your (DATE IN Q.41) visit, did (he/she). . . (READ LIST AND CODE ONE.)

Recommend surgery to treat your (CONDITION)? (ASK Q. A&B) 1

Discourage you from having surgery? (ASK Q. C) 2

Discuss surgery without either recommending or discouraging it? (SKIP TO Q. 45) 3 70/

| CARD 05 |
| 7-8/05 |

IF RECOMMENDED SURGERY, ASK A&B:

A. What operation did (SECOND OPINION DOCTOR) recommend?

9-13/
14-18/

_____
NAME OF OPERATION

B. When did (SECOND OPINION DOCTOR) say you should have the operation? Was it. . . (READ LIST AND CODE ONE.)

As soon as possible? 1

Within one month? 2

Within three months? 3

Within six months? 4

Within twelve months? 5

(DO NOT READ) THE DOCTOR DID NOT SAY WHEN YOU SHOULD HAVE THE OPERATION 6 19/

** SKIP TO Q.45 **

IF DISCOURAGED SURGERY, ASK C:

C. Why did (SECOND OPINION DOCTOR) say that you should not have an operation? Was it because. . . (READ LIST AND CODE YES OR NO FOR EACH.)

	YES	NO	
(He/She) didn't think you actually had (CONDITION)?	1	2	20/
(He/She) thought that you had (CONDITION), but it wasn't bad enough then for you to have an operation?	3	4	21/
(He/She) thought that you should try other kinds of treatment before you decided to have an operation?	1	2	22/
(He/She) thought that because of other health problems you shouldn't have an operation?	3	4	23/
(He/She) thought that you should not have an operation at that time but should keep seeing a doctor in case you might need one sometime in the future?	1	2	24/
(He/She) thought that you should have more tests done to make sure that you really had (CONDITION)?	3	4	25/
Any other reasons? (SPECIFY) _____	1	2	26/
_____			27-28/ 29-30/
(DO NOT READ) THE DOCTOR DIDN'T SAY WHY	3		31/

45. Did (SECOND OPINION DOCTOR) recommend any other kinds of treatment such as medicines, equipment or appliances, or diet therapy?

YES	1	
NO (SKIP TO Q. 46)	2	32/

IF YES, ASK:

A. What other kinds of treatment did s(he) recommend? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINES OR DRUGS.	1	33/
PHYSICAL THERAPY	2	34/
EQUIPMENT OR APPLIANCES (E.G., TRUSS, EYEGLASSES, PESSARY, BRACES, PROSTHESIS). .	3	35/
DIET THERAPY	4	36/
OTHER TREATMENT (SPECIFY)	1	37/
_____		38-39/
_____		40-41/

46. Did you give (SECOND OPINION DOCTOR) permission to talk to your other doctor(s) about your visit with (him/her)?

YES (SKIP TO Q. 47)	1	
NO	2	42/

IF NO, ASK:

A. Did you not give permission because. . . (READ LIST. CODE ONE RESPONSE FOR EACH ITEM.)

	YES	NO	
(SECOND OPINION DOCTOR) did not ask to talk to your other doctor(s)?	1	2	43/
You felt the second opinion doctor would be more objective if (he/she) had no contact with other doctor(s)?	3	4	44/
You thought your other doctor(s) would think your getting a second opinion was a waste of time and money?	1	2	45/
You thought your other doctor(s) might be offended if he/she knew you got a second opinion ?	3	4	46/
Any other reason? (SPECIFY) _____	1	2	47/
_____			48-49/
			50-51/

47. Does your insurance pay all, part, or none of the doctor's bill for the second opinion?

ALL	1	
PART	2	
NONE	3	52/

ASK ALL:

48. Are there any other doctors with whom you have discussed surgery for your (CONDITION)? If you have had the operation, please do not include any doctors seen after surgery only.

YES 1

NO (SKIP TO Q. 49) 2 53/

IF YES, ASK:

A. How many other doctors have you seen?

NUMBER OF OTHER DOCTORS 54-55/

B. When did you see the doctor(s)? (PROBE FOR MOST RECENT MONTH AND YEAR OF VISIT TO EACH DOCTOR COUNTED IN A.)

DOCTORS COUNTED IN A	RECORD ANSWERS TO B	RECORD ANSWERS TO C			
		RECOMMEND	DISCOURAGE	DISCUSS ONLY	
Doctor 1	____/____ MONTH YEAR 56-59/	1	2	3	60/
Doctor 2	____/____ MONTH YEAR 61-64/	1	2	3	65/
Doctor 3	____/____ MONTH YEAR 66-69/	1	2	3	70/
Doctor 4	____/____ MONTH YEAR 71-74/	1	2	3	75/
Doctor 5	____/____ MONTH YEAR 76-79/	1	2	3	80/

C. Did the doctor you saw on (DATE IN B ABOVE) recommend surgery to treat your (CONDITION), discourage you from having surgery, or discuss surgery without either recommending or discouraging it? (ASK FOR EACH DOCTOR COUNTED IN A AND RECORD ABOVE.)

| CARD 06 |
| 7-8/06 |

49. Since (DATE IN LOG ITEM #6), have you had an operation to treat your (CONDITION)?

YES (SKIP TO Q. 50) 1

NO 2 9/

IF NO, ASK:

A. Are you planning to have surgery?

YES (ASK B AND C) 1

NO (ASK D, E AND F AS APPLICABLE) 2 10/

IF PLANNING TO HAVE SURGERY, ASK:

B. When do you think you will have it? _____ MONTH/YEAR 11-14/

C. What is the name of the operation? _____ 15-19/

_____ 20-24/

NOW SKIP TO INSTRUCTION BEFORE Q.51

IF NOT PLANNING TO HAVE SURGERY, ASK:

D. Since (LOG DATE ITEM #6), have you had any other kinds of treatment for your (CONDITION), such as medicine, equipment or appliances, or diet therapy?

YES 1

NO (SKIP TO F) 2 25/

IF YES, ASK:

E. What other kinds of treatment have you had? (DO NOT READ LIST. CODE ALL THAT APPLY.)

MEDICINES OR DRUGS. 1 26/

PHYSICAL THERAPY 2 27/

EQUIPMENT OR APPLIANCES (E.G., TRUSS, EYEGLASSES, PESSARY, BRACES, PROSTHESIS). . 3 28/

DIET THERAPY 4 29/

OTHER TREATMENT (SPECIFY) 1 30/

_____ 31-32/

_____ 33-34/

CARD 06

F. What made you decide not to have surgery? (RECORD VERBATIM.)

35-36/
37-38/
39-40/

NOW SKIP TO INSTRUCTION BEFORE Q.51

50. What was the name of the operation?

41-45/
46-50/

NAME OF OPERATION

A. When did you have the operation? _____ MONTH/YEAR 51-54/

B. What made you decide to have surgery? (RECORD VERBATIM.)

55-56/
57-58/
59-60/

IF NO SECOND OPINION (I.E., "NO" TO Qs. 29 AND 30), SKIP TO Q.53.

51. What, if any, influence did the second opinion you obtained have on your decision? (RECORD VERBATIM.)

61-62/
63-64/
65-66/

| CARD 06 |

52. If you had not gotten a second opinion, do you think you would have made the same decision?

YES 1

NO 2 67/

ASK EVERYONE

53. Before you actually had the operation, did you feel that you were (READ CHOICES) about the operation?

Fully informed 1

Somewhat informed, or 2

Not very well informed 3 68/

---

54. Who would you say made the final decision about whether or not to have surgery? (DO NOT READ CATEGORIES. CODE ALL THAT APPLY.)

YOURSELF 1 69/

YOUR SPOUSE 2 70/

A FRIEND 3 71/

DOCTOR _____ . . . 4 72/
(SPECIFY) 73/

DOCTOR _____ . . . 1 74/
(SPECIFY) 75/

OTHER _____ . . . 2 76/
(SPECIFY) 77/

---

55. How much control did you have over the decision about surgery? Would you say you had. . .(READ LIST AND CODE ONE.)

Total control 1

Some control 2

No control 3 78/

| CARD 06 |

56. How would you regard <u>your role</u> in that decision? Would you say you had. (READ LIST AND CODE ONE.)

Too much responsibility?	1	
About the right level of responsibility? .	2	
Too little responsibility?	3	79/

CLOSING: Thank you very much for your cooperation.

TIME ENDED: _____ AM PM

Exhibit E.17

SSOP Health Outcome Substudy
Ratings of Procedure Characteristics

Health Services Research Center
The University of Michigan
February, 1979

Second Surgical Opinion Program
Health Outcome Substudy

RATINGS OF PROCEDURE CHARACTERISTICS

Panel_____ Panelist_____ Date:_____

SECTION I

1. Operative Procedure:_____

2. Synonyms/variants: _____

3. Diagnoses/conditions:

(a) Name: A._____ (b) Accuracy of Diag. ____% (c) Percent of Surgery ____%

(a) Name: B._____ (b) Accuracy of Diag. ____% (c) Percent of Surgery ____%

(a) Name: C._____ (b) Accuracy of Diag. ____% (c) Percent of Surgery ____%

(d) Residual of unlisted procedures: Percent of Surgery ____%

4. Does age over/under 65 years affect:

		Diagnosis: A	B	C
(a) Indications for surgery:	(1) Yes (2) No			
(b) Clinical Outcome:	(1) Yes (2) No			

(c) If answers to (a) or (b) are yes, this form applies to age group:___ over 65 ___ under 65

SECTION II: Indications for Surgical Treatment:

	Diagnosis: A	B	C
5. Evidence for efficacy of procedure: 0. none 1. conflicting 2. some 3. conclusive			
6. Objective clinical indications: 0. none 1. suggestive 2. clear 3. absolute			
7. Non-clinical indications: 0. none 1. suggestive 2. clear 3. absolute			
8. Importance of case familiarity: (a) Adequate data obtainable in one visit? (1) Yes (2) No			
(b) Value of communication between first and second opinion physicians: 0. none 1. low 2. moderate 3. high 4. essential			
9. Extent of professional consensus regarding indications for treatment: 0. none 1. low 2. moderate 3. high 4. total			
10. Adherence to professional consensus: 0. none 1. low 2. moderate 3. high 4. total			
11. Value of consultations: 0. none 1. low 2. moderate 3. high 4. essential			

SECTION III: Therapeutic Interventions

	Surgical Treatment Diagnosis A	B	C	Medical Treatment Diagnosis A	B	C
12. Deferability: 1. up to one month 2. one to six months 3. six to twelve months 4. limited time over twelve months 5. unlimited time (indefinitely)						
13. Therapeutic Objectives: 1. cure 2. arrest progression/ prevent complications 3. palliation 4. rehabilitation 5. exploration/diagnosis						
14. Treatment morbidity: (a) Pain due to treatment: 1. none 2. mild 3. moderate 4. severe						
(b) Incapacitation due to treatment: (days)						
(c) Reliability of treatment morbidity rating: 1. low 2. medium 3. high						
15. Best time to assess outcomes: (months after treatment) (a) Intermediate outcome						
(b) Ultimate outcome						

SECTION IV: Expected Outcomes

	Without Treatment		
	Diagnosis		
	A	B	C
16. Dysfunctional states at any time in course (codes from list)			
(a) most dysfunctional state			
(b) next most dysfunctional state			
(c) next most dysfunctional state			
(d) next most dysfunctional state			
(e) next most dysfunctional state			

	Surgical Treatment			Medical Treatment		
	Diagnosis			Diagnosis		
	A	B	C	A	B	C
17. Expected clinical course (Percent of individuals who will:						
(a) be cured						
(b) be improved						
(c) remain stable						
(d) deteriorate						
(e) reliability of ratings: 1. low 2. medium 3. high						
18. Morbidity and Mortality						
(a) Rate of serious morbidity						
(b) Mortality rate						

SECTION V: Patient Impacts

	Pre-treatment Status			Without Treatment			Surgical Treatment			Medical Treatment		
	Diagnosis			Diagnosis			Diagnosis			Diagnosis		
	A	B	C	A	B	C	A	B	C	A	B	C
19. Pain												
(a) Severity: 0. none 1. mild 2. moderate 3. severe	*											
(b) Duration: 0. none 1. intermittent 3. constant												
20. Psychological distress												
(a) Severity: 0. none 1. mild 2. moderate 3. severe												
21. Activity impairment:												
(a) Self-care: 0. none 1. mild 2. moderate 3. severe												
(b) Major role activity: 0. none 1. mild 2. moderate 3. severe												
(c) Mobility: 0. none 1. mild 2. moderate 3. severe												

* Write rating in upper corner. In lower corner write the reliability of the rating
1. low 2. medium 3. higher

CONSULTATION PROGRAM FOR ELECTIVE SURGERY

Exhibit E.18

Patient's Name: _____ Age: _____
Patient's Mother's/Father's 1st Name: _____
Address: _____
_____
Medicaid #: _____ Telephone #: _____
Diagnosis: _____
_____
Hospital: _____
Proposing Surgeon's Name: _____
Address: _____
_____ Telephone #: _____

INDICATIONS FOR TONSILLECTOMY

1. Peritonsillar abscess ☐
2. Pyrexial tonsillitis accompanied by convulsions or flare-up of streptococci-related entities ☐
3. Removal of unnecessarily large tonsils when necessary to facilitate an indicated adenoidectomy ☐
4. Five episodes of pharyngotonsillitis within the past (12) months for children seven years or under and four or more bouts of pharyngotonsillitis per year for at least (2) years for those children over seven years of age ☐

INDICATIONS FOR ADENOIDECTOMY

1. Recurrent suppurative otitis media ☐
2. Recurrent middle ear effusions or secretory otitis media with resulting conductive hearing loss, with at least six weeks trial of medical management ☐
3. Mouth breathing secondary to the obstruction of the nasopharynx with adenoidal tissue ☐
4. Severe chronic respiratory obstruction with cardiopulmonary complications secondary to adenoidal blockage of the posterior nasal choanae ☐

INDICATIONS FOR SEPTOPLASTY

1. Obstruction to the nasal airway causing loss of normal function, such as poor air entry, a sense of obstruction, with secondary headaches and one of the following: ☐
   a. Poor air-conditioning of inspired air causing stasis, catarrh and bronchitis ☐
   b. Interference with the drainage of the air sinuses with history of secondary infection ☐
   c. Interference with smell and taste or hearing, especially with co-existent nasal polyps ☐
   d. Nasal obstruction contributing to mouth breathing and poor development of teeth or palatal deformity ☐
   e. History of trauma with any of the above ☐
   f. As approach to Sphenoid Sinus, e.g. (for pituitary surg., yttrium screw removal, etc.) ☐

NOTE: The Foundation will selectively verify information contained in this form by obtaining copies of office or hospital records, retrospectively. You have the option, prior to surgery, to submit with this form, copies of relevant patient information supporting the "checked" portions. This will minimize your inconvenience of responding to our request for medical record information.

MAIL TO: HEALTH CARE FOUNDATION OF WESTERN MASSACHUSETTS, INC.
1252 ELM STREET, WEST SPRINGFIELD, MA 01089

WHITE COPY: HEALTH CARE FOUNDATION
CANARY COPY: PHYSICIAN'S OFFICE

CONSULTATION PROGRAM FOR ELECTIVE SURGERY

Patient's Name: _____ Age: _____
Patient's Mother's/Father's 1st Name: _____
Address: _____
_____
Medicaid #: _____ Telephone #: _____
Diagnosis: _____
_____
Hospital: _____
Proposing Surgeon's Name: _____
Address: _____
_____ Telephone #: _____

INDICATIONS FOR JOINT CARTILAGE SURGERY

1. History
   Two or more effusions and evidence of frequent buckling and locking with flexion deformity ☐

2. Examination
   Joint symptoms and evidence of collateral and/or cruciate ligamentus laxity with positive McMurray sign (grinding test) ☐

3. X-ray studies
   Joint symptoms and evidence of loose bodies and/or positive arthrogram ☐

4. Laboratory Tests
   Joint symptoms and report on joint fluid aspirations indicating transudate with positive diagnostic studies by arthroscope or arthrogram and reports of positive biopsy ☐

INDICATIONS FOR DISC SURGERY

1. Intractable disabling sciatica and myelographic abnormality plus evidence of at least two of the following conditions: ☐

   a. Muscle weakness ☐

   b. Sensory loss ☐

   c. EMG abnormality ☐

   d. Reflex abnormality ☐

   e. Limitation of straight leg raising ☐

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CONSULTATION PROGRAM FOR ELECTIVE SURGERY

Patient's Name: _____ Age: _____
Patient's Mother's/Father's 1st Name: _____
Address: _____
_____
Medicaid #: _____ Telephone #: _____
Diagnosis: _____
_____
Hospital: _____
Proposing Surgeon's Name: _____
Address: _____
_____ Telephone #: _____

INDICATIONS FOR HYSTERECTOMY

Infection as an Indication for Hysterectomy

1. TOA unresponsive to medical Rx ☐
2. Chronic PID with one of the following:
   a. three febrile bouts ☐
   b. accompanied by adnexal masses unresponsive to prior conservative treatment ☐

Endometriosis as an Indication for Hysterectomy

Endometriosis demonstrated by laparoscopy or previous laparotomy plus one of the following: ☐
a. Failure of medical therapy with symptoms of pain and/or adnexal mass or pelvic mass ☐
b. Rupture of adnexal endometrioma ☐
c. Bilaterally enlarged adnexa ☐

Uterine Fibroids as an Indication for Hysterectomy

1. Size > 12 weeks gestation ☐
2. Size < 12 weeks gestation, but at least one of the following present: ☐
   a. Location of the fibroids causing pressure on the bladder with resulting urinary symptoms (urologic disease excluded) and/or location of fibroids causing partial obstruction of ureter or ureters and/or fibroids causing pressure in rectal area ☐
   b. Degeneration of a fibroid causing pain and softening of the fibroid ☐
   c. Documented rapid growth ☐
3. Patient requiring anterior and/or posterior colporrhaphy for symptomatic pelvic relaxation ☐

Neoplasia as an Indication for Hysterectomy

1. Cervix
   a. Severe dysplasia or carcinoma in situ (CIN Grade 3) ☐
   b. Invasive carcinoma of the cervix ☐
2. Corpus
   a. Adenomatous hyperplasia with atypia ☐
   b. Endometrial carcinoma in situ ☐
   c. Repeated pathologic diagnosis of cystic and adenomatous hyperplasia in the absence of exogenous estrogen therapy ☐
   d. Invasive carcinoma of the endometrium ☐
   e. Gestational trophoblastic disease ☐
      1. Primary management of hydatid mole ☐
      2. Primary management of nonmetastatic disease when future pregnancy is not desired ☐
      3. Uterine disease resistant to chemotherapy ☐
   f. Other cancers of the myometrium (leiomyosarcoma, mixed mesodermal tumors, lymphoma, etc.) ☐
   g. Pathology report on cervical tissue and/or endometrial tissue requiring hysterectomy (see those indications) ☐

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CONSULTATION PROGRAM FOR ELECTIVE SURGERY

Date: _____

Patient's Name: _____ Age: _____ Sex: _____

Patient's Mother's/Father's 1st Name: _____

Address: _____

_____ Zip Code: _____

Medicaid #: _____ Telephone #: _____

Diagnosis: _____

Proposed Surgical Procedure: _____

Hospital: _____

Proposing Surgeon's Name: _____ Medicaid Provider #: _____

Address: _____

_____ Zip Code: _____ Telephone #: _____

Physician's Signature _____

INDICATIONS FOR HEMORRHOIDECTOMY

All hemorrhoidectomies are subject to a Second Surgical Opinion.
It is still, however, necessary to complete the above portion and submit it to the Foundation.

INDICATIONS FOR VARICOSE VEINS SURGERY

1. Skin changes
   - a. stasis ulcers ☐
   - b. stasis dermatitis ☐

INDICATIONS FOR CHOLECYSTECTOMY

1. Gallstones demonstrated by
   - a. Oral cholecystogram ☐
   - b. Plain film of abdomen ☐
   - c. IV cholangiogram ☐
   - d. Trans hepatic cholangiogram ☐
   - e. Trans duodenal cholangiogram ☐
   - f. Ultrasound ☐
   - g. Palpation during previous operation ☐

2. Presumed Gall Bladder Disease based upon typical symptoms and:
   - a. Nonfunction or poor function on oral cholecystogram or IV cholangiogram ☐
   - b. Common bile duct stone demonstrated by Ia - f ☐
   - c. Fistula between GB and duodenum, small bowel or large bowel demonstrated by any means ☐
   - d. Non Calculous disease ☐
     1. cholesterolosis ☐
     2. polyps ☐
     3. neoplasms ☐
     4. Cholesterol crystals in bile ☐

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[redacted]: information contained in this form will be selectively and retrospectively verified by obtaining copies of office or hospital records. You have the option, prior to surgery, to submit along with this form copies of relevant patient information supporting the "checked" portions. This will minimize your inconvenience of responding to our request for medical record informatio

Exhibit E.19

SECOND OPINION PROGRAM FOR ELECTIVE SURGERY

Patient's Name:_____ Date of Birth:_____

[redacted]ress:_____ Telephone #:_____

Medicaid Identification #:_____

[redacted]gnosis:_____ ICDA Code:_____

Recommended Surgical Procedure:_____

[redacted]pital in which operation is to be performed:_____

Proposing Surgeon's Name:_____

Office Address:_____ Telephone #:_____

INDICATIONS FOR TONSILLECTOMY ALONE OR WITH ADENOIDECTOMY

Please check the indications which describe your patient's condition.

☐ 1. Peritonsillar abscess

☐ 2. Documented repeated episodes of acute tonsillitis with or without cervical adenitis - four episodes in a 12 month period or 6 in a 24 month period.

☐ 3. Tonsillar enlargement sufficient to produce difficulty with swallowing or with speech.

☐ 4. History of persistent strep pharyngitis despite repeated medical treatment.

INDICATIONS FOR ADENOIDECTOMY

[redacted]ease check the indications which describe your patient's condition.

☐ 1. Recurrent suppurative otitis media

☐ 2. Recurrent middle ear effusions or secretory otitis media despite six weeks trial of medical management.

☐ 3. Nasal obstruction secondary to the obstruction of the nasopharynx with adenoidal tissue.

☐ 4. Severe chronic respiratory obstruction with cardio-pulmonary complications secondary to adenoidal blockage of the posterior nasal choanae.

INDICATIONS FOR REPAIR OF THE NOSE AND SEPTUM

[redacted]ease check the indications which describe your patient's condition.

☐ 1. Developmental or traumatic deformity of the nasal septum, sufficient to produce:

☐ a. Significant obstruction to the nasal airway;

☐ b. Interference with the drainage of the air sinuses with a history of secondary infection.

I, _____, certify that to the best of my knowledge the
(Patient's Signature)
above information is an accurate description of my condition, and I understand the proposed surgical procedure.

Date:_____ Proposing Surgeon's Signature:_____

For Hospital Use: Coordinator #:_____ Criteria Met: ☐ Refer to Pilgrim Foundation: ☐

Reasons:_____

Date:_____

Note: Information contained in this form will be selectively and retrospectively verified by obtaining copies of office or hospital records. You have the option, prior to surgery, to submit along with this form copies of relevant patient information supporting the "checked" portions. This will minimize your inconvenience of responding to our request for medical record information

SECOND OPINION PROGRAM FOR ELECTIVE SURGERY

Patient's Name_____ Date of Birth:_____

Address:_____ Telephone #:_____

Medicaid Identification #:_____

Diagnosis:_____ ICDA Code:_____

Recommended Surgical Procedure:_____

Hospital in which operation is to be performed:_____

Proposing Surgeon's Name:_____

Office Address:_____ Telephone #:_____

INDICATIONS FOR JOINT CARTILAGE SURGERY

Please check the indications which describe your patient's condition.

☐ 1. Joint symptoms and positive arthrogram for a torn meniscus

☐ 2. Joint symptoms and positive arthroscopic exam for a torn meniscus

☐ 3. Locked knee

4. Any other history or physical findings require a second opinion.

INDICATIONS FOR DISC SURGERY/SPINAL FUSION

☐ 1. Intractable pain with neurologic deficit and positive myelogram. Neurologic deficit is defined as including one of the following:

☐ a. Muscle atrophy or weakness;

☐ b. Sensory loss or reflex changes; or

☐ c. Bladder involvement

2. Any repeat disc operation on patient must have a second opinion prior to surgery.

_____, certify that, to the best of my knowledge, the
(Patient's Signature)
above information is an accurate description of my condition, and I understand the proposed surgical procedure.

Date:_____ Proposing Surgeon's Signature:_____

-Please turn over-

Note: Information contained in this form will be selectively and retrospectively verified by obtaining copies of office or hospital records. You have the option, prior to surgery, to submit along with this form copies of relevant patient information supporting the "checked" portions. This will minimize your inconvenience of responding to our request for medical record informati

SECOND OPINION PROGRAM FOR ELECTIVE SURGERY

Patient's Name: _____ Date of Birth: _____

Address: _____ Telephone #: _____

Medicaid Identification #: _____

Diagnosis: _____ ICDA Code: _____

Recommended Surgical Procedure: _____

Hospital in which operation is to be performed: _____

Proposing Surgeon's Name: _____

Office Address: _____ Telephone #: _____

INDICATIONS FOR HYSTERECTOMY

Please check the indications which describe your patient's condition.

Uterine Fibroids

☐ 1. Size > 12 weeks gestation

☐ 2. Size < 12 weeks gestation: please check the indications below which describe the patient's condition:

- ☐ a. Location of the fibroids causing pressure on the bladder with resulting urinary symptoms (urologic disease excluded) and/or location of fibroids causing partial obstruction of ureter or ureters and/or fibroids causing pressure in rectal area.
- ☐ b. Degeneration of fibroid causing pain and softening of fibroid.
- ☐ c. Location of fibroids such that adnexal mass might be present, requiring investigation.
- ☐ d. Documented rapid growth.

Endometriosis

☐ 1. Endometriosis demonstrated by laparoscopy or previous laparotomy.

- ☐ a. Failure of medical therapy with symptoms of pain and/or adnexal mass or pelvic mass.

Infection

☐ 1. Tube-ovarian abscess unresponsive to medical treatment.

☐ 2. Chronic pelvic inflammatory disease, documented by laparoscopy, culdoscopy or other surgical intervention, associated with:

- ☐ a. Chronic severe pain

-Please turn over-

endometrioma

☐ c. Bilaterally enlarged adnexae

tions (two or more)

☐ 3. Adnexal abscess adhering to uterine wall

☐ 4. Pyometria unresponsive to medical therapy or D&C

Neoplasia

☐ 1. Cervix

☐ a. Severe dysplasia, or carcinoma in situ

☐ b. Invasive carcinoma of the cervix

☐ 2. Corpus

☐ a. Adenomatous hyperplasia with atypia

☐ b. Endometrial carcinoma in situ

☐ c. Repeated pathologic diagnosis of cystic and adenomatous hyperplasia, in the absence of exogenous estrogen therapy

☐ d. Invasive carcinoma of the endometrium

☐ e. Gestational trophoblastic disease:

☐ 1. Primary management of hydatidiform mole

☐ 2. Primary management of non-metastatic disease when future pregnancy is not desired

☐ 3. Uterine disease resistant to chemotherapy

☐ 4. Other malignancies of myometrium

Ovary and Tube

☐ 1. Suspected or proven tumors

☐ 2. Bilateral adenexectomy for benign neoplasia

_____, certify that to the best of my knowledge the
(Patient's Signature)
above information is an accurate description of my condition, and I understand the proposed surgical procedure.

Date:_____ Proposing Surgeon's Signature:_____

For Hospital Use: Coordinator#:_____ Criteria Met: ☐ Refer to Pilgrim Foundation: ☐

Reasons:_____

Date:_____

Note: Information contained in this form will be selectively and retrospectively verified by obtaining copies of office or hospital records. You have the option, prior to surgery, to submit along with this form copies of relevant patient information supporting the "checked" portions. This will minimize your inconvenience of responding to our request for medical record informatic

SECOND OPINION PROGRAM FOR ELECTIVE SURGERY

Patient's Name: _____ Date of Birth: _____

Address: _____ Telephone #: _____

Medicaid Identification #: _____

Diagnosis: _____ ICDA Code: _____

Recommended Surgical Procedure: _____

Hospital in which operation is to be performed: _____

Proposing Surgeon's Name: _____

Office Address: _____ Telephone #: _____

INDICATIONS FOR CHOLECYSTECTOMY

Please check the indication below if it describes your patient's condition.

☐ 1. Symptomatic gallstones with positive x-ray evidence of stones.

INDICATIONS FOR VARICOSE VEINS SURGERY

All Varicose Veins Excisions require Second Surgical Consultation.

INDICATIONS FOR HEMORRHOIDECTOMY

All Hemorrhoidectomies require Second Surgical Consultation.

I, _____, certify that to the best of my knowledge the
(Patient's Signature)
above information is an accurate description of my condition, and I understand the proposed surgical procedure.

Date: _____ Proposing Surgeon's Signature: _____

For Hospital Use: Coordinator #: _____ Criteria Met: ☐ Refer to Pilgrim Foundation: ☐

Reasons: _____

Date: _____

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